

Purchasing Week

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\$6 A YEAR U.S. AND CANADA \$25 A YEAR FOREIGN

3-Way Materials Battle Keeps Getting Hotter

Inventory Caution Spreading Boom, Cheery Economists Say

New York—Top business and government economists are reading nothing but good into current inventory caution. Their advice: Don't let the leveling off of some of the leading barometers scare you.

Inventory caution today, they note, means steady high-level sales through early '61. It eliminates any danger of "boom and bust"—making 1960 one of the highest level years of stability on record.

The latest Commerce Dept. inventory statistics report for March gives added details on how P.A.'s are cutting down on their rate of inventory accumulation.

Here's a rundown on the new trend as seen from three different sources:

• **Statistical indicators**—PURCHASING WEEK's periodic survey of leading business barometers indicates the current flattening out of production and sales will persist into summer.

• **Business sentiment**—More and more business leaders recognize (Turn to page 4, column 3)

Congress Seeks to Push Pentagon Toward Better Procurement Practices

Washington—Military buying practices are about to be hit where it hurts the most—in the pocketbook.

The House Appropriations Committee plans to make a general \$400-million reduction in over-all Pentagon procurement funds for fiscal 1961, starting July 1. The reason: to force military procurement services into "more economical procurement practices."

If approved, the general procurement reduction will force the Pentagon to apply the saving across the board by trimming pricing and cost estimates in individual contracts and tightening (Turn to page 37, column 1)

Rayon Strapping Fights Steel For Packaging Jobs

Philadelphia—American Viscose Co. has introduced a rayon strapping material designed to make inroads on the job being done by conventional steel straps in a variety of packaging jobs.

A company spokesman claimed the new "Avistrap" could mean large savings to strapping users. While a big cost reduction won't come in initial price (the rayon material will sell for slightly less than comparable roll of steel), savings should result from added flexibility and improved handling and lighter weight factors.

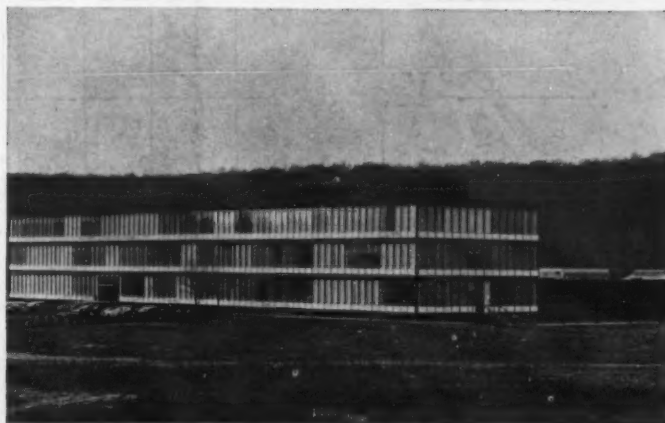
George J. Alles, American Viscose purchasing director, will supervise the new Avistrap department. Alles is also vice president and general manager of sales in the film division.

Here's how American Viscose says Avistrap stacks up against the conventional steel strapping:

• **Strength**. Although the new material has a lower tensile strength than steel, it has a higher working strength due to its ability to stretch. The elongation factor of 12% to 14% (as opposed to 3% in steel) will enable the rayon to resist big impacts.

• **Flexibility**. Avistrap easily wraps around corners, eliminates tendency to overpackage.

• **Safety**. Avistrap has no sharp (Turn to page 37, column 1)



RESEARCH LAB: In this modernistic building at Tarrytown, N. Y., 200 Union Carbide scientists seek new uses for plastics and chemicals.

Fierce Competition for Typewriter Market Forces 'Unofficial' Discounts

New York—Office typewriter makers haven't cut list prices—but hard-bargaining P.A.'s are currently paying far below list for both standard and portable models.

The influx of foreign imports—now being added to an already fiercely competitive industry—has led to a wave of unofficial discounting, which is taking the form of:

• **Higher allowances**. While "blue-book" trade-in allowances on older machines officially range from \$5 to \$75, many dealers around the country are prepared to pay as much as 15% above blue book in order to make a sale.

• **Discounting**. While the equipment makers themselves are refusing to change their list prices, franchised dealers are offering buyers as much as 10% discounts (in addition to allowances) on quantity purchases.

"A salesman came in just the other day," reported the purchasing director for a large New York firm, "and offered me \$25 off list if I'd buy ten machines."

Meanwhile, leading suppliers were expressing fears that the discount trend might rub off on other office equipment such as adding machines, desks, and chairs.

"We're considering offering one free desk with every ten the (Turn to page 37, column 3)

Producers of Plastics, Steel, Aluminum Eying Same Markets, Giving P.A.'s Grandstand Seat

• **Union Carbide Corp.** formally dedicates a new technical service lab tomorrow devoted exclusively to finding new uses for chemicals and plastics. All 200 researchers in the three-story stainless steel building at Tarrytown, N. Y., will work on application studies and customer service.

• **U. S. Steel** boasted last week that it has more than 1,700 research and development personnel—most of them concentrated in a Monroeville, Pa. center—at work on fundamental and applied research projects.

• **Alcoa's** chief executive officer predicts that a substantial "up-surge" in the use of aluminum will take place soon, and the Aluminum Co. of America—thanks to its vigorous marketing, research and development efforts—will be prepared to meet it and capitalize on it.

• **New York**—The industry developments and recent pronouncements listed above are manifestations of the no-holds-barred battle being fought by steel, plastic, aluminum, and other major material producers for bigger shares of the nation's ever expanding markets.

Ultimate outcome: better production and sales for all without a doubt as each material overlaps or combines with another to meet (Turn to page 38, column 1)

Copper Strike Forestalls Anticipated Price Drop

New York—Three developments affecting world copper markets are expected to build a temporary price support for U. S. copper producers.

While domestic demand for the red metal continues at a slow pace, increased European demand, a strike at Chilean mines, (Turn to page 37, column 4)

—This Week's—

Purchasing Perspective MAY 9-15

COMPUTERS UNLIMITED—A new breed of salesman is crowding the industrial trail. He's the computer—EDP expert. His job: convince industrial management and their purchasing staffs that the electronic computer is no longer a glamorous plaything for giant corporations but a necessary work-a-day tool for nearly every medium-sized and smaller firm.

Hardly a week passes without at least one electronics firm announcing a lower-priced "first" of some kind of EDP or computer equipment. Last week National Cash Register unveiled what it described as the first computer capable of "reading" an ordinary business document. For sale at \$75,000 (or rental at \$1,850 per month), NCR's 390 utilizes a magnetic coating on the back of records that enables it to read commercial documents at a glance, so to speak, unlike conventional computers that must first be fed electronic records for translation.

NCR claims its machine can, in 12 minutes and at a cost of less than \$2, turn out a detailed report on 10,000 separate sales slips. In half a day, it can write paychecks and prepare payroll records for 1,000 employees. Selling point for P.A.'s—the device can cut the cost of many paperwork jobs by as much as 50%.

On the same day the NCR 390 was making its debut, Packard Bell Electronics Corp. was introducing its PB 250—a general purpose digital computer with "microspeed speed" and the at- (Turn to page 38, column 4)

P/W PANORAMA

• **Break-Even Points** offer one means for the alert P.A. to get a clue to a coming price change. But you must know how to figure these points, and how to make the information work to your profit. For one method, see pages 8 and 9.

• **Red Tape and Committees**—That's where some firms bog down in trying to solve their day-to-day problems. But Wallace & Tiernan, Inc., has a different recipe: coffee and conversation. See the centerspread on pages 20 and 21.

• **Do You Shop Around?** Most purchasing agents do, and many like to use options while they're doing it. "The Law and You" column on page 22 tells briefly how options work. There's also a rundown on new and pending legislation affecting P.A.'s.

• **Planning to Buy Typewriters?** The P/W Buyer's Guide on page 15 lists the data you'll need on the major standard and electric models, along with the price, types available, special features of each, and many additional details.

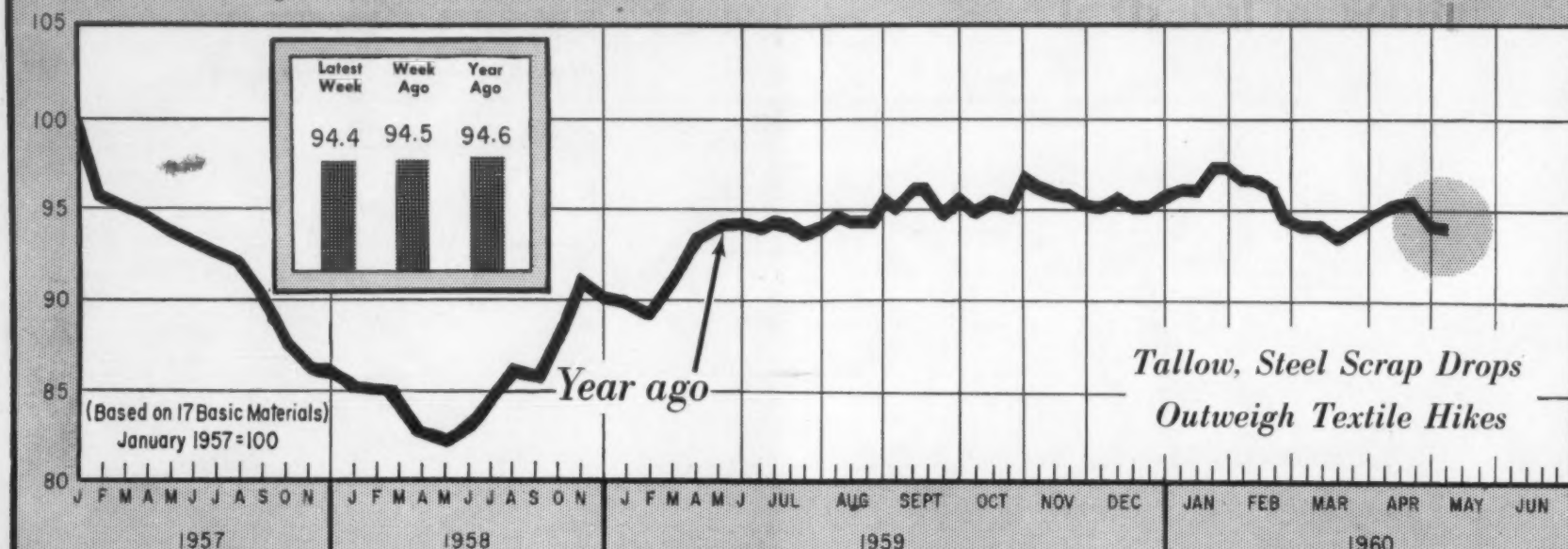
Aluminum Deposit

Miami—It used to be that you could walk into any bank and buy all the gold you wanted. You can't do that anymore, but if it's aluminum you want, the Miami National Bank has it—700,000 lb.

The bank bought the aluminum for \$176,000 at a bankruptcy sale of the assets of Ludlum Corp., once Florida's biggest aluminum products maker. The price paid averages out to about 25¢ a lb. By selling it piecemeal, the bank conceivably could wind up with a profit on the metal.

Purchasing Week Industrial Materials Price Barometer

This index, based on 17 basic materials, was especially designed by the McGraw-Hill Department of Economics.



This Week's Commodity Prices

METALS

	May 4	Apr. 27	Year Ago	% Yrly Change
Pig iron, Bessemer, Pitts., gross ton.....	67.00	67.00	67.00	0
Pig iron, basic, valley, gross ton.....	66.00	66.00	66.00	0
Steel, billets, Pitts., net ton.....	80.00	80.00	80.00	0
Steel, structural shapes, Pitts., cwt.....	5.50	5.50	5.50	0
Steel, structural shapes, Los Angeles, cwt.....	6.20	6.20	6.20	0
Steel, bars, del., Phila., cwt.....	5.975	5.975	5.975	0
Steel, bars, Pitts., cwt.....	5.675	5.675	5.675	0
Steel, plates, Chicago, cwt.....	5.30	5.30	5.30	0
Steel scrap, #1 heavy, del. Pitts., gross ton.....	34.00	35.00	35.00	-2.9
Steel scrap, #1 heavy, del. Cleve., gross ton.....	33.00	33.00	34.00	-2.9

Steel scrap, #1 heavy, del. Chicago, gross ton.....	31.00	32.00	32.00	-3.1
Aluminum, pig, lb.....	.26	.26	.247	+5.3
Secondary aluminum, #380 lb.....	.25	.25	.218	+14.7
Copper, electrolytic, wire bars, refinery, lb.....	.326	.326	.311	+4.8
Copper scrap, #2, smelters price, lb.....	.248	.245	.258	-3.9
Lead, common, N.Y., lb.....	.12	.12	.115	+4.3
Nickel, electrolytic, producers, lb.....	.74	.74	.74	0
Tin, Straits, N.Y., lb.....	.994	.992	1.025	-3.0
Zinc, Prime West, East St. Louis, lb.....	.13	.13	.11	+18.2

FUELS†

Fuel oil #6 or Bunker C, Gulf, bbl.....	2.10	2.10	2.00	+5.0
Fuel oil #6 or Bunker C, N.Y., barge, bbl.....	2.47	2.47	2.37	+4.2
Heavy fuel, PS 400, Los Angeles, rack, bbl.....	2.15	2.15	2.15	0
Lp-Gas, Propane, Okla., tank cars, gal.....	.035	.035	.045	-22.2
Gasoline, 91 oct. reg., Chicago, tank car, gal.....	.115	.115	.12	-4.2
Gasoline, 84 oct. reg., Los Angeles, rack, gal.....	.112	.108	.117	-4.3
Kerosene, Gulf, Cargoes, gal.....	.09	.09	.091	-1.1
Heating oil #2, Chicago, bulk, gal.....	.088	.088	.13	-32.3

CHEMICALS

Ammonia, anhydrous, refrigeration, tanks, ton.....	90.50	90.50	90.50	0
Benzene, petroleum, tanks, Houston, gal.....	.34	.34	.31	+9.7
Caustic soda, 76% solid, drums, carlots, cwt.....	4.80	4.80	4.80	0
Coconut oil, inedible, crude, tanks, N.Y. lb.....	.168	.165	.213	-21.1
Glycerine, synthetic, tanks, lb.....	.293	.293	.278	+5.4
Linseed oil, raw, in drums, carlots, lb.....	.166	.166	.16	+3.8
Phthalic anhydride, tanks, lb.....	.165	.165	.165	0
Polyethylene resin, high pressure molding, carlots, lb.....	.325	.325	.35	-7.1
Rosin, W.G. grade, carlots, fob N.Y. cwt.....	14.00	14.00	9.85	+42.1
Shellac, T.N., N.Y. lb.....	.31	.31	.30	+3.3
Soda ash, 58%, light, carlots, cwt.....	1.55	1.55	1.55	0
Sulfur, crude, bulk, long ton.....	23.50	23.50	23.50	0
Sulfuric acid 66% commercial, tanks, ton.....	22.35	22.35	22.35	0
Tallow, inedible, fancy, tank cars, N.Y. lb.....	.06	.063	.074	-18.9
Titanium dioxide, anatase, reg. carlots, lb.....	.255	.255	.255	0

PAPER

Book paper, A grade, Eng. finish, Untrimmed, carlots, cwt.....	17.75	17.75	17.00	+4.4
Bond paper, #1 sulfite, water marked 20 lb, car. lots, cwt.....	25.20	25.20	24.20	+4.1
Chipboard, del. N.Y., carlots, ton.....	100.00	100.00	95.00	+5.3
Wrapping paper, std. Kraft, basis wt. 50 lb rolls.....	9.25	9.25	9.00	+2.3
Gummed sealing tape, #2, 60 lb basis, 600 ft. bundle.....	6.30	6.30	6.40	-1.6
Old corrugated boxes, dealers, Chicago, ton.....	18.00	20.00	21.00	-14.3

BUILDING MATERIALS‡

Cement, Portland, bulk carlots, fob New Orleans, bbl.....	3.65	3.65	3.65	0
Cement, Portland, bulk carlots, fob N.Y., bbl.....	4.18	4.18	4.25	-1.6
Southern pine, 2x4, s4s, trucklots, fob N.Y., mftbm.....	124.00	124.00	126.00	-1.6
Douglas fir, 2x4, s4s, carlots, fob Chicago, mftbm.....	139.00	139.00	141.00	-1.4
Douglas fir, 2x4, s4s, carlots, fob Toronto, mftbm.....	105.00	105.00	120.00	-12.5
Fir plywood, 1/4" AD, 4x8, dealer crld, fob mill, msf.....	66.00	64.00	85.00	-22.4

TEXTILES

Burlap, 10 oz. 40", N.Y., yd.....	.120	.117	.098	+22.4
Cotton middling, 1", N.Y., lb.....	.342	.341	.363	-5.8
Printcloth, 39", 80x80, N.Y., spot, yd.....	.208	.205	.188	+10.6
Rayon twill, 40 1/2", 92x62, N.Y., yd.....	.235	.235	.22	+6.8
Wool tops, N.Y., lb.....	1.460	1.460	1.575	-7.3

HIDES AND RUBBER

Hides, cow, light native, packers, Chicago, lb.....	.195	.195	.295	-33.9
Rubber, #1 std ribbed smoked sheets, N.Y., lb.....	.405	.405	.37	+9.5

† Source: Petroleum Week ‡ Source: Engineering News-Record

This Week's

Price Perspective

MAY 9-15

DEMAND AND PRICE WEAKNESS is spreading to a growing number of key raw materials.

A few recent examples:

• **Metals**—New order lag is prompting both steel and aluminum spokesmen to cut 1960 production estimates. Steel now sees only 120-million tons for the year—a drop of 10-million tons from earlier estimates. Aluminum experts have pared expected 10% to 15% gain to a more modest 5% to 7%. It reduces chances for significant across-the-board metal hikes in the second half.

• **Steel scrap**—Poor steel showing (last week mills operated at only 75% of capacity) is pushing down scrap tags. Just a few days ago, for example, Pittsburgh prices for the key No. 1 heavy melting grade dipped to \$34 a ton—the lowest quote since May 1958.

• **Paper**—Dip in paperboard orders recently pushed operating rates down to 86% of capacity—compared to the 94% rate prevailing in previous weeks of 1960. It's affecting waste paper tags (which are at a two-year low) and could delay expected price boosts in some paper products.

• **Lumber**—Poor first quarter home building rate (17% below '59) is resulting in a lumber glut. There's small chance of usual seasonal rise, and green fir 2x4s now go for \$68 mftbm—\$9 below a year ago.

RAW MATERIAL EASINESS IS SYMPTOMATIC of a general change in the nation's business pattern.

The buying surge of 1959—with its accompanying price increases—is giving way to a period of more stable demand.

Production data certainly bears this out. Last year, for example, industrial output rose 9% from January through December. Contrast that to the first four months of this year when over-all output failed to show any increase at all.

You can, of course, say that the "flattening out" is occurring at very high—in fact, near record levels. But that's not the point.

The mere fact that the demand curve has changed direction is important. History shows that such shifts always have had a strong psychological effect on prices—tending to bend them in the same direction.

Coupled with current hand-to-mouth buying and growing capacity, it should keep industrial prices on an even keel through 1960 and into 1961.

IRONICALLY ENOUGH, ebbing of inflationary pressures isn't without its share of headaches.

For example, price stability won't be entirely painless to companies that have been too liberal with wage hikes.

Many find themselves faced with rising wage costs at a time when market conditions don't allow an appropriate pass-through via higher tags. For some this means an uncomfortable cost-price squeeze.

Price stability is causing some repercussions in the stock market, too.

Part of the current stock easiness—though certainly not all of it—can be traced back to the flattening out of the price curve.

The temporary end of inflation has reduced the urgency of investing in stocks to hedge against inflation. This means less demand for stocks. And like any other commodity, a fall-off in demand always brings about a price reaction.

Starting today the price for fir plywood, 1/4" AD, 4x8, dealer carload, fob mill, msf will appear regularly under the Building Materials section of This Week's Commodity Prices.

The nickel, electrolytic, dealers, lb. quotation (under Metals) has been dropped. For some time this price has been the same as nickel, electrolytic, producers, lb.

Push-Pull of Costs and Demand Add Up to Rosy Price Outlook for Industrial Heating Equipment

Sales Compare Well With 1959, But Imports Pose Threat for Future

New York—Industrial heat treating equipment provides one of the brighter spots in today's economic picture. A prime capital item, this equipment is still riding the crest of a demand curve that started moving up in the second quarter of 1959.

And the price outlook is steady to rising. For some types—such as motor generator and frequency transformer equipment—manufacturers expect tags to stay stable in the foreseeable future.

For other types—such as electric furnaces, immersion and strip heaters—prices may go up as much as 5% late in the third quarter or early fourth quarter of 1960.

PUSH-PULL FACTORS

The push of higher costs and the pull of demand are the general forces operating to keep prices on firm and rising levels.

• **Material costs.** Rising prices for insulating materials, steel specialty products, alloys, and components, plus lower discount rates, were the cost increases noted by manufacturers.

Most frequently mentioned was the upswing in the cost of alloys. The increased expense resulted, in some cases, from higher costs in servicing alloys to equipment specifications—some nickel alloys, for example—rather than from higher prices for the alloy itself.

• **Sale prospects.** Sales for the first quarter of this year compare very well with year-ago figures (see chart at right). The biggest volume item—furnaces—registered a \$14.6-million dollar sales figure compared to \$10.2-million for the first quarter of 1959.

And for the year as a whole the prospect is for a substantial increase over 1959 sales—although not up to the 11.6% rise predicted late last year.

ROSY OUTLOOK

This optimism is based on backlog orders which, most fabricators report, have been building up solidly. A typical comment—coming from a Midwest producer—"Our backlog is up to four to four and a half months—a very good figure."

The generally rosy demand picture moved one West Coast furnace and furnace parts manufacturer to remark, "Prices for industrial heating equipment should go upward because there is more business all around."

Contributing to the happy outlook of heating equipment manufacturers is the absence of any extensive foreign competition. Some low-temperature ovens are being imported, but not enough to cause much domestic concern.

However, a potential threat in the near future is seen from imports of standard small heating units and induction heating equipment from Western Europe and Great Britain.

NEW DEVELOPMENTS

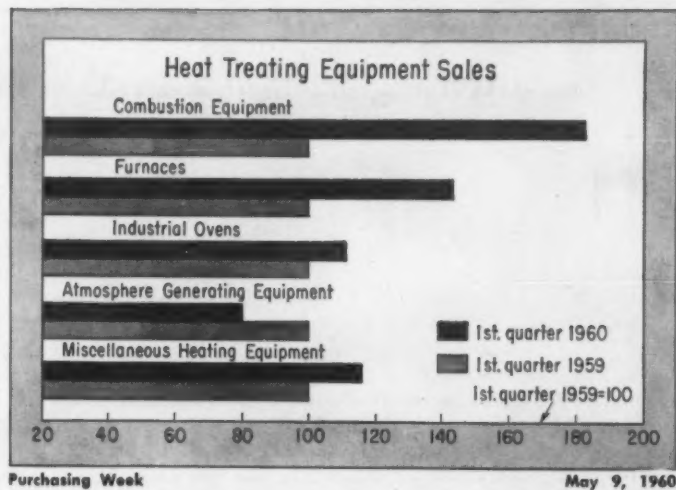
An interesting development in the heat treating line is noted by

G. W. Helsberg, district manager for Lindberg Furnaces. "A majority of customers are getting into more sophisticated equipment," he reported.

More sophisticated equipment, he pointed out, meant more highly automated equipment geared to do a precise job. This purchasing trend has been growing both for general heat treat work and also for more specialized jobs.

Other new developments are reported in heat transfer devices and in greater use of atmosphere in heat treating.

These developments, while aimed at improving the efficiency and cost maintenance of the equipment, won't shake up the industry market in any way. All the evidence points to a smooth road ahead in 1960 for the heat treating equipment industry in the United States.



Facts of Light!

SOMETIMES IT'S CHEAPER TO LEAVE LIGHTS BURNING THAN TO TURN THEM OFF

The life of fluorescent lamps is affected, of course, by the number of times they're started. Assuming you had 10,000 40-watt preheat lamps in a room, by leaving them burning during a 15-minute lunch period, instead of turning them off, you'd save about \$150 in a work year.

THERE ARE 7 DIFFERENT SHADES OF "WHITE" IN FLUORESCENT LAMPS

All seven basic "white" colors are needed to satisfy the color demands of a wide variety of commercial and industrial lighting users. The "cool" colors: Daylight, Cool White and DeLuxe Cool White are good for color matching. The "warm" colors: Warm White, DeLuxe Warm White and Soft White approximate the color of incandescent lamps and accentuate the reds. Plain "White" offers the best efficiency and is used where no particular color "atmosphere" is needed.

A LITTLE SOAP AND WATER CAN STOP THE LOSS OF HALF YOUR LIGHT

Dust and dirt allowed to accumulate on lamps and fixtures can reduce the light they produce by nearly 50%. The owning and operating cost remains constant. By knowing how fast light is depreciating, it is easy to figure amortization and power waste and establish a cleaning program that gives you maximum lighting economy.

3,000 DIFFERENT TYPES OF LAMPS ALL PRODUCED IN 1 PLANT under 1 STANDARD OF QUALITY CONTROL

Champion has continuously produced top quality lamps since 1900. All research, development, manufacturing and test facilities are concentrated in one modern plant... all dedicated to provide you with light at lowest cost.

CHAMPION LAMP WORKS, Lynn, Massachusetts
CHAMPION INCANDESCENT-FLUORESCENT • YOUR BEST BUY IN LAMPS

Washington Perspective

MAY 9-15

Look for election year fissures to widen between Pres. Eisenhower and Congress.

Eisenhower personally is contributing to the growing antipathy between the two branches of government. He is going on the attack, trying to pin the "spending" label on Democrats again.

His unusual special message to Congress last week is an indication of the increasing political sparring you can expect between now and July. In his statements, Eisenhower comes close to calling the 86th a "do-nothing" Congress.

In what amounts to a second "State of the Union" message, Eisenhower demands action on some 40 of his legislative recommendations. Here is what they'll be fighting over the next few months:

• **Medical aid for the aged.** The President proposes a \$1.2-billion joint federal-state program to provide extensive medical benefits for elderly persons with major illnesses. The states and the federal government would foot 80% of the costs of major illnesses over \$250, including surgical and hospitalization charges.

• **Minimum wage.** Eisenhower wants to raise the minimum wage to \$1.15 an hour and extend coverage to 3.1-million more workers, mainly in the retail field. Democrats want \$1.25 an hour and 7.8-million more people to be eligible.

• **Depressed areas aid.** Eisenhower wants a limited program of grants for technical assistance and loans. The Democrats favor some \$250-million or more in grants.

• **Postal increase.** Eisenhower calls for hiking first class mail from 4¢ to 5¢ and air mail from 7¢ to 8¢. Democrats balk unless the Administration agrees to increase federal employee salaries by a total of \$1.2-billion.

• **Gasoline tax.** Eisenhower wants 1/2¢ per gallon increase in the federal tax. Democrats leaders oppose any raise.

• **Schools.** Eisenhower favors loans to local districts to cover half their interest on \$3-billion of new construction bonds. Democrats favor a billion dollar grants program, and possibly some funds for higher teacher salaries.

Eisenhower faces further troubles with Congress over the Federal Power Commission. Democratic leaders in Congress may decide against Eisenhower's nomination of two new FPC commissioners, both of whom would have been considered non-controversial if this were a normal year. But it's not.

Eisenhower named Thomas J. Donegan, member of the Subversive Activities Control Board, to replace William R. Connole. Connole's five-year term is expiring and Eisenhower passed him over for reappointment.

Connole's ouster created a storm of controversy from critics who charge that Eisenhower buckled to pressure from big oil and gas lobbies not to have him renamed. Connole has been regarded as a protector of consumer interests.

The second nominee is Paul A. Sweeney, long-time Justice Dept. attorney, who was chosen to fill the unexpired term of the late commissioner John B. Hussey.

Democrats see two advantages in holding off confirmation of the appointees: First, they could keep the issue alive that Eisenhower favors lax regulatory enforcement of business. And secondly, Democrats would be able to pick the men for the posts themselves next year if a Democrat wins the White House.

This would assure Democrats a quick majority on the five-member commission. Commissioner Arthur Kline's appointment expires next year, and Democrats could fill that vacancy also.

Weekly Production Records

	Latest Week	Week Ago	Year Ago
Steel ingot, thous tons	2,132	2,210*	2,604
Autos, units	138,311	144,886*	118,059
Trucks, units	26,171	25,964*	26,148
Crude runs, thous bbl, daily aver	7,945	7,967	7,702
Distillate fuel oil, thous bbl	12,012	12,678	12,375
Residual fuel oil, thous bbl	6,622	6,164	6,552
Gasoline, thous bbl	27,507	28,246	27,141
Petroleum refineries operating rate, %	81.3	81.6	79.6
Container board, tons	155,927	151,890	166,955
Boxboard, tons	99,088	88,578	102,456
Paper operating rate, %	96.0	98.2*	95.4
Lumber, thous of board ft	259,688	258,425	249,052
Bituminous coal, daily aver thous tons	1,426	1,468*	1,349
Electric Power, million kilowatt hours	13,300	13,213	12,546
Eng const awards, mil \$ Eng News-Rec	530.4	493.1	403.3

*Revised

Inventories Level Off, But Business Is Good

Top Economists Foresee Steady High-Level Sales Continuing to Early '61

(Continued from page 1)

nize this new trend—but are not worried. Their feeling is typified by Roger M. Blough, chairman of U.S. Steel, who notes that while this year may be average—it's "the best average we've ever had."

• **Government** — Washington experts now also lean toward the stability viewpoint. They see as inevitable a downward pressure stemming from some dropoff in the rate of inventory accumulation. But they're betting on it being offset by a pickup in equipment purchases and healthy consumer outlays.

INVENTORIES

Inventory statistics provide much of the evidence that the trend over the next few months will be "level" rather than "up."

March figures, for example, show P.A.'s cutting down considerably on their rate of inventory accumulation. Factory stocks were up only \$400-million in March—compared to an \$880-million increase in January and a \$600-million boost for the month of February.

Couple this with a cutback in sales, and the result is an increase in days' supply.

In hard goods, the February-March jump in days' supply was significant—from 60 days to 63 days (see chart above, right). This should tend to be a further check on inventory buying in the next few months.

One top government economist feels that the economy won't be affected too much by this easing in inventory buying, how-

ness situation for the first couple of months.

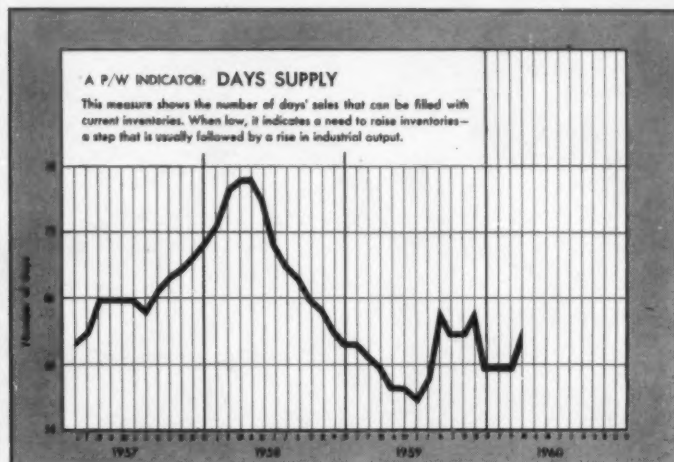
You can get another clue as to what is currently happening to inventories by taking a look at finished goods inventories—merchandise already off the production lines. Durable goods on the shelf have been increasing steadily at about \$200-million per month.

The question here is whether goods are piling up and not being moved—or whether durable manufacturers are getting set for what they consider will be a good

This is another pretty good sign that the rising phase of the boom is about over. For when orders run below shipments, sooner or later there has to be some adjustment to production schedules.

The latest statistics on order backlogs would indicate that such adjustments may not be far off. Unfilled orders have dropped to the lowest point in more than a year.

An optimistic note: business plans for plant and equipment outlays hint that a strong upturn



NEW RISING TREND: March supply jumped by three days (from 60 to 63 days); could keep future inventory rises to more modest proportions.

volume of sales in the spring. On this one, you pay your money and take your choice.

Optimists feel that the shelf goods will be moved as business shows a normal spring pickup. Pessimists, however, doubt this. They point to the fact that new orders have been falling off.

NEW ORDERS

Take a closer look at the new order trend and you can see where

in machinery orders may be in the cards.

In fact, there are some indications this uptrend may already be underway: (1) cutting tool orders rose 3% in March—though part of this was due to strong demand from foreign buyers. (2) McGraw-Hill's non-electric machinery order index rose 4% in March.

OTHER INDICATORS

Other indicators also point toward relative stability rather than growth over the next few months.

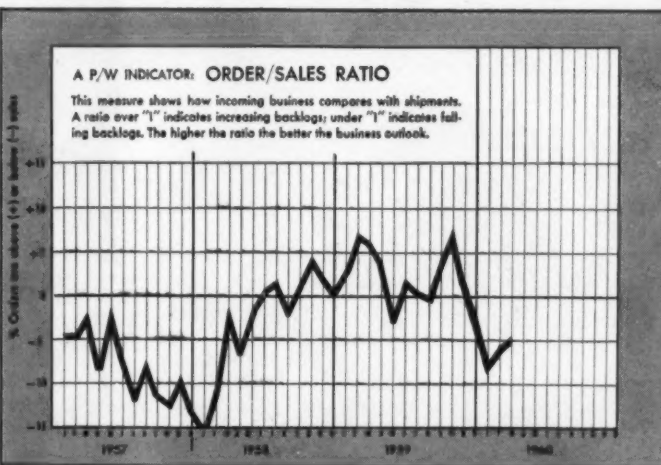
• **Construction**—Both housing starts and contract awards have remained steady over recent weeks. Both, incidentally, are below year-ago levels—leading to some weakness in construction material sales and prices.

• **Sensitive commodity prices**—These quotes are supposed to rise and fall with changes in over-all demand. The fact that they've been nervous in recent weeks would indicate lack of any clearcut upward or downward trend.

• **Business incorporations and failures.**—Both have showed little movement either way since the beginning of the year—again hinting at a pattern of stability. Incorporations for March, however, were almost 5% below a year ago—indicating that the climate for immediate business expansion has deteriorated somewhat.

• **Security prices**—The stock market has suffered a mild setback in recent weeks. But not all can be attributed to Wall Street bearishness about the business future.

Temporary end of the inflationary spiral has reduced demand for common stocks as a hedge against inflation.



TRAILING ORDERS: They've been below sales for four consecutive months now; could indicate some production adjustments in the future.

ever. "The economy has gone through an inventory adjustment in the last few months," he points out, "but this is only natural, considering that the economy was coming out of a long steel strike."

The adjustment in steel inventories, he says, was to be expected when stocks were filled—and there is nothing alarming in this situation.

What was unexpected by business in general was the speed with which pipelines and orders could be filled. It was this miscalculation—looking for a more prolonged period required to fill backlog—that led to "over optimism" about the general busi-

ness situation.

First of all, the drop in orders is primarily centered in the key hard good sector. In March, for example, durable goods dropped a resounding \$300-million from February levels.

Moreover, almost all categories in this sector declined. The only exceptions were fabricated metals and transportation equipment—both of which reported some increase in bookings.

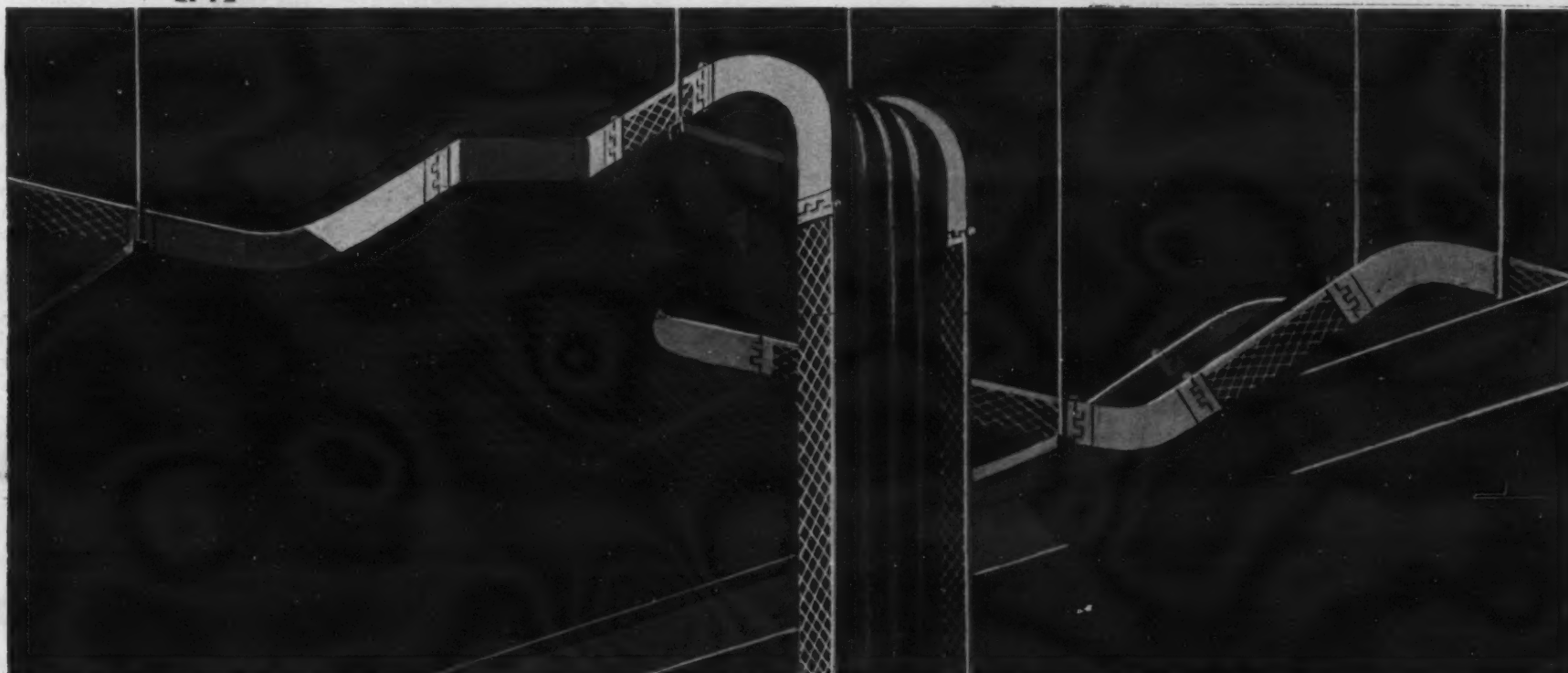
This over-all decline is keeping new orders behind sales. In fact, as the chart above shows, hard goods orders have been trailing sales for four consecutive months now.



WHY THIS?



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Wireway's lightweight and unique coupling method, speeds joining of straight lengths and fittings—even in close quarters. A Cope system comes *complete* with all necessary accessories—ready to go.

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Oregon P. A.'s Elect Rufus B. Tobey Of Crown Zellerbach as President

Portland, Ore.—Rufus B. Tobey, Crown Zellerbach Corp., was elected president of the Purchasing Agents Assn. of Oregon at the organization's April meeting.

Other new officers are: Wayne A. Rodman, Jantzen, Inc., first vice president; James Failing, Freightliner Corp., second vice president; Wyman F. Mills, Simpson Logging Corp., secretary; Ralph Dawson, First National Bank of Oregon, treasurer;

and Robert W. Stewart, Aluminum Co. of America, national director.

Elected trustees were: Kenneth A. Schmitz, E. L. Bartells Co.; Fred Hodge, Portland General Electric Co., and Neil Lovell, Omark Industries.

Francis Harrington, local attorney and law instructor, discussed the Wright-Patman law, giving the group specific examples of advantages obtainable within the legal framework.

Buyer for Olympics Works to End His Job

San Francisco—Any P. A. who wants to learn how to cram four years of buying and leasing into an 18-month stretch can take a few pointers from Robert H. Birchenall.

For the past 18 months Birchenall has been purchasing director of the recently completed VIII Winter Olympics, at Squaw Valley—the first bona fide purchasing operation in the history of the Olympic Games.

Out of this experience has come confidence that he can handle any industrial purchasing

assignment. Birchenall feels that there is too much emphasis, among P. A.'s, on becoming specialists in certain lines. "All an experienced P. A. needs anywhere is a month or two of indoctrination," he says. "Once you are skilled in procurement principles you can buy anything."

Right from the start, Birchenall recognized that his new job involved more of procurement than purchasing. Most of the equipment was obtained on a lend lease basis. The Department of Defense and the State of California

teamed up to lend mountains of stuff. Cities and civic groups donated or leased some. A great deal of what was purchased outright was obtained with special discounts from State surplus stocks.

Birchenall's task basically was to coordinate all this procurement. This included arranging for transportation—no easy job when you consider that Squaw Valley, high in the Sierras, is more than 200 miles from San Francisco. It even meant arranging to have special items fabricated that were needed only for the Olympics—such as numbered plastic balls for place drawings or snow-proof plastic scorecard holders.

Birchenall quit a purchasing job that he had held for 11 years with the California Physicians' Service to take on the Olympics assignment. He knew at the time that come June, 1960, he might well find himself collecting unemployment insurance—but the prospect didn't phase him.

Right now, Birchenall is busy working himself out of his job—liquidating the huge empire that took over two years to build. One of his final tasks is to supervise inventory and evaluation of

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BECAUSE G-E MONEY SAVER LAMPS ARE MORE UNIFORM—Test after test of production lamps proves that, on the average, 999 out of every 1,000 G-E Fluorescents will be good, right from the start. (You might even lose money on the bet because many actual users report their performance to be even better than this!)

G-E FLUORESCENT LAMPS DO SAVE YOU MONEY—Whether you buy a carton or a carload, the uniformity you get from General Electric Fluorescents—lamp after lamp after lamp—is your best assurance of getting the most light for your money. Not only do you get 999 sure starters out of every 1,000 G-E Fluorescent Lamps you buy, but after almost two years 990

of them will still be going strong! So you not only get more light, but your maintenance and production people like the freedom from annoyance and interruptions.

Performance like this stems from General Electric's constant search for new ways to improve all G-E Fluorescent Lamp types. Make sense? Then place your next order for lamps with your G-E Lamp distributor now—or write: General Electric Co., Large Lamp Dept. C-013, Nela Park, Cleveland 12, Ohio.

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GENERAL ELECTRIC . . . WHERE BRIGHT IDEAS BECOME BETTER LAMPS



ROBERT H. BIRCHENALL

about \$3-million worth of equipment, which had been purchased outright. On April 1, the Beaches and Parks Dept. took title to this property—which ranges from office chairs and coffee pots to small tractors. What Beaches and Parks can't absorb it will give to other State agencies.

A special committee is busy computing depreciated values on this equipment and when the figures are totaled up California taxpayers will have an idea of how much the games cost them. Birchenall figures average depreciation of about 20%.

One of Birchenall's biggest headaches is figuring out how to dispose of ceremonial paraphernalia. Cities that had donated flagpoles received them back—with appropriate plaques. A similar disposition was made of many "ice" statues (sculptures covered with ice to make them look like ice carvings).

Nevertheless, Birchenall finds himself stuck with four aluminum flagpoles and a number of ice statues. He now is canvassing cities with new civic centers to dispose of these items profitably.

In the meantime, Birchenall finds himself getting closer to the job market. "But I'm too busy right now to look for a job actively," he said. He has full confidence that a good P.A. can make out in any situation.

The New N&W . . .



NATION'S GOING-EST RAILROAD!

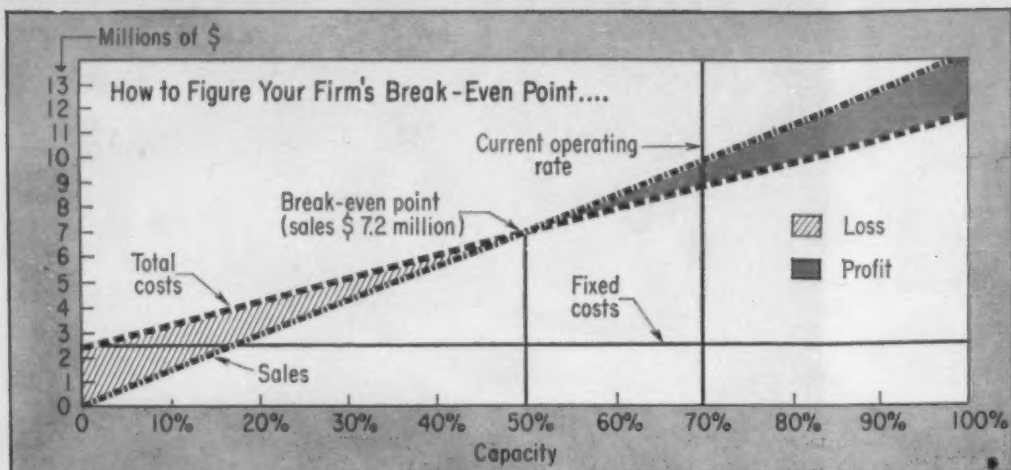
- ▶ America's newest fleet of diesel locomotives . . . 529 units with average age only 2.5 years.
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Purchasing Week

May 9, 1960

For Tips on Price Changes

New York—Break-even points are getting more attention again.

Steel and a lot of metalworking firms—forced to cut production—are seeing their profits dwindle away. Reason: Their production is fast declining to their break-even point—the operating rate at which profits disappear.

A closer look at these break-even points can:

• Sharpen the P.A.'s perspective on his role in shaping his company's profit-and-loss performance.

• Give the P.A. clues on coming price changes.

WHAT IT IS

It is exactly what the name implies—the dividing line between profit and loss, the operating point where total sales are only enough to cover total expenses.

The principle is simple enough. Overhead and other fixed costs prevent a firm from operating profitably at low capacity rates because these fixed costs then are spread over a very few units—making unit costs very high (usually well above selling price).

Take for example a case where you have millions of dollars of fixed overhead and only produce one unit. That unit, of course, is going to cost you millions in fixed costs alone.

The more units you produce, the lower the cost per unit, and the closer unit cost comes to unit selling price.

At the break-even point, your unit cost exactly equals selling price. After that, costs are below price and profit is possible.

HOW TO SET UP

To find your break-even point, you need a few financial statistics (readily available at most firms). Then follow these steps:

Step 1. Scale out on graph paper the range of operating rates from 0 to 100% on the horizontal scale (as in the chart, above left). Vertically place the dollar figures of your company's actual and potential sales.

Step 2. Take the total sales from your company's latest financial statement, and plot it above the company's normal operating rate for the period covered by the statement (70% on chart, above left), and draw a vertical line.

Step 3. Draw another line from "O" in the lower left hand corner to the sales figure and extend it to limits of your chart (see dot dash line on chart). This gives you a rough sales volume measure for every operating rate up to full production capacity.

Step 4. Now take your fixed costs—rent, depreciation, interest charges, etc.—that remain unchanged no matter what your operating rate is, and line it horizontally across the chart.

Step 5. Next, take your total costs figure—taken also from your company financial statement—and position it above the same operating rate as you did your total sales figure.

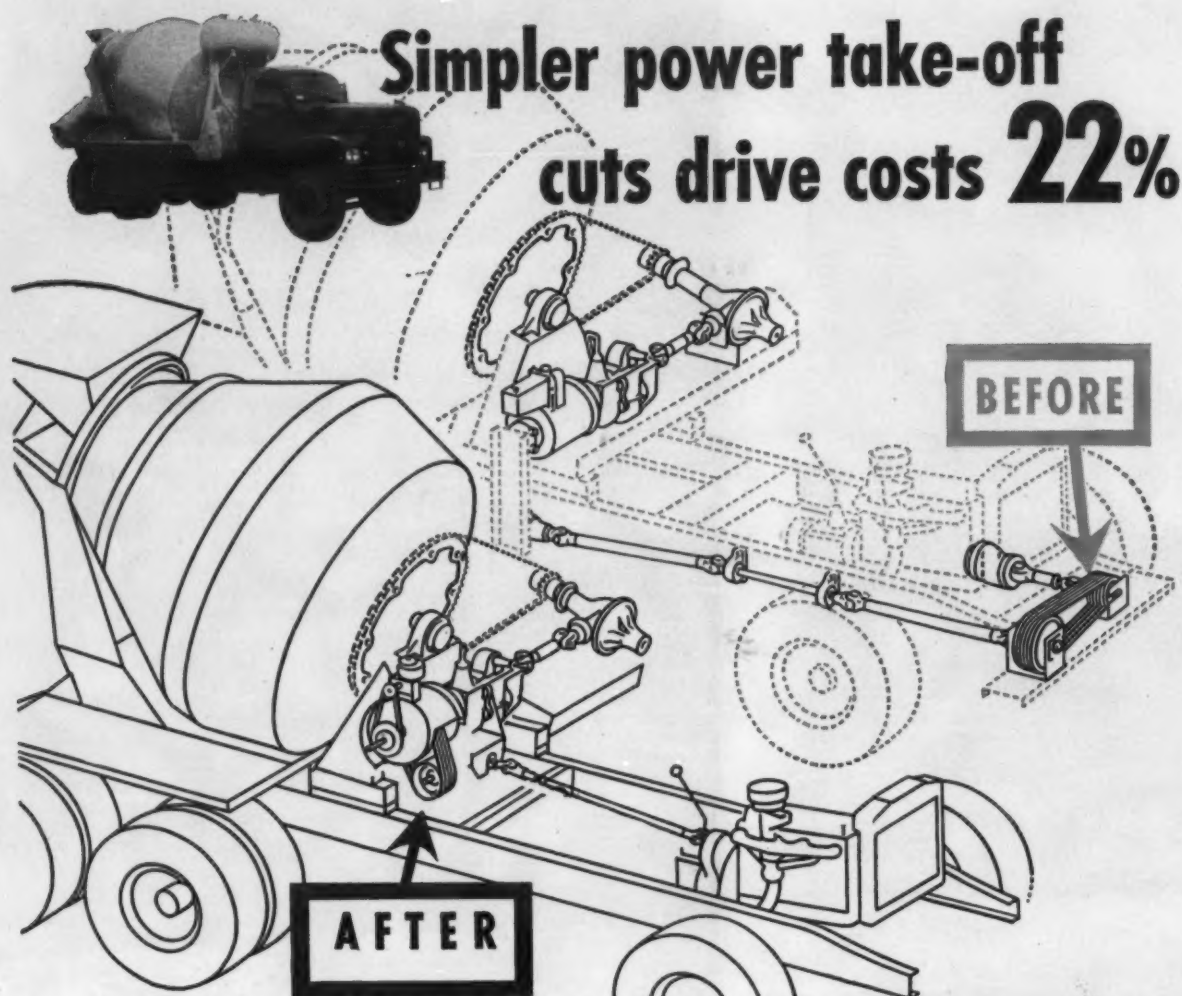
Step 6. Connect that point with the beginning of your fixed costs line (at "O" capacity, since fixed costs are your total costs at that point) and extend this line also to the limit of your chart (see dashed line in chart left). This gives you a rough total costs measure for every operating rate.

Where the total costs line and total sales line meet is your break-even point. To the right of that point the gap between them means profit (sales above costs), and to the left is loss (sales below costs).

Look directly below your break-even point to see the percent of capacity at which your company must operate to avoid loss (50% in the above example).

BREAKING DOWN COSTS

Not all costs can be put readily into fixed and variable categories. Some are there to an extent at



Super HC V-Belts—packing higher hp capacity in smaller space than conventional V-belts—have eliminated need for front-end power take-off on concrete-mixer trucks made by Concrete Transport Mixer Company of St. Louis, Mo.

By letting take-off be shifted to rear, Super HC V-Belts cut drive costs alone by 22%, besides saving weight and cost of complex linkage and

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With Super HC, sheave diameters can be cut 30% to 50%, drive space up to 50%, and drive weight 20% and more. A product of Specialized Research in the world's largest V-belt laboratories, Super HC V-Belts are helping many manufacturers put more compact, lighter weight, lower cost drives on all types of machines.

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What's your power transmission design problem? Your Gates Field Representative is ready to help you solve it—to cut space, weight, cost with Super HC V-Belt Drives. Ask

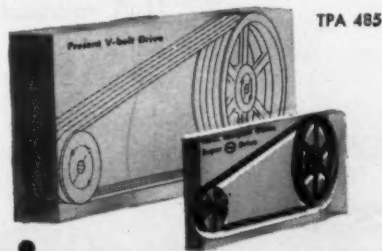
him for your free copy of "The Modern Way to Design Multiple V-Belt Drives" or write The Gates Rubber Company Sales Division, Inc., Denver, Colorado.

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TPA 485

Watch Your Suppliers' Break-Even Points

any level of sales or production, but vary somewhat with changing business activity. For example, overtime hours for maintenance men would be a variable part of maintenance costs; some minimum inventory expenses would fall into fixed costs, etc.

These items can be broken down and allocated to fixed and variable cost groupings as in the model table, upper right (taken from Management Aids for Small Business put out by the Small Business Administration).

SHORT-CUT METHOD

In the table at right, variable costs are \$6.5-million and sales are \$10-million. In other words, 65% of every sales dollar goes for variable expenses. That means the remaining 35% of sales covers fixed costs and net profit.

If there is no net profit—and there is none at break-even point—then the full 35% sales would consist of fixed costs.

This leads to a shorthand method of figuring break-even point. If fixed costs = 35% of break-even sales; then \$2.5-million (fixed costs, see table) = .35 break-even sales. Expressed mathematically, $\frac{2.5}{.35} = \text{break-even sales}$, or \$7.14-million sales must be made to break even (check chart, upper left).

The disadvantage of this method is that it doesn't give the operating rate at which the break-even point is achieved.

BREAK-EVEN AND THE P.A.

The P.A.'s function could be described broadly as doing what he can to lower the "total costs" line.

Any reduction of costs by the P.A. does two things:

- Increases the gap—or profit margin—between sales and total costs.

- Lowers the percentage of capacity at which his company must operate in order to break even.

Since the P.A. deals mainly with materials, most of the economies he can effect will reduce the variable costs sector of Total Costs.

But he must be careful not to offset reductions in variable costs by increases in fixed costs. For example, inventorying large quantities of an item at lower prices will result, of course, in a variable cost reduction. But borrowing money to finance this inventory can increase fixed costs by adding to interest charges.

As a general rule, if you increase fixed costs by the same amount as you reduce variable costs, then you have to achieve a higher sales volume in order to break even.

For example, if we increase the fixed costs in our model (table, upper right) from \$2.5-million to \$3-million and reduce our variable costs a like amount—from \$6.5-million to \$6-million—our total costs still remain \$9-million, but for \$10-million worth of sales.

Now our fixed costs plus profit equals 40% of every sales dollar, and if we want to find our break-even point by eliminating profits, then \$3-million (our new fixed costs figure) will equal 40% of sales, or our break-even sales = $\frac{3}{.4} = \$7.5\text{-million}$ as com-

pared to our \$7.14-million figure under the former conditions. Presumably, too, our break-even operating rate will be 52% rather than 50% of capacity (check chart, left).

Therefore, a rise in fixed costs must be offset by a greater cut in variable costs if you want to maintain or lower your break-even point.

SUPPLIER BREAK-EVEN POINT

Usually the P.A. can get the information necessary to estimate approximately the break-

even point of an important supplier.

But getting the break-even operating rate of a supplier will do just as well.

Because then the P.A. knows that, if this supplier's operating rate is close to the break-even rate—and declining—there's considerable cost pressure on the supplier to raise prices, and the P.A. can act accordingly.

If the supplier's operating rate is close to his break-even point, but rising, it's a good time for the P.A. to try for advantageous terms.

...From Company Financial Statement (\$ millions)

TOTAL SALES		\$10.0
TOTAL COSTS		\$9.0
	Fixed	Variable
Direct labor		\$2.0
Direct materials		3.0
Factory overhead	\$1.0	0.5
Sales	0.6	0.9
Gen'l administrative	0.9	0.1
	\$2.5	\$6.5
NET PROFIT (before taxes)		\$1.0

Purchasing Week

May 9, 1960

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cuts wiring time... makes strong, positive connection

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EASY TO WIRE
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Burns all
year for
less
than 8¢

BUILT-IN
NEON
BULB

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quic
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NO TOOLS NEEDED
Just
clamp it on
the wire

P/W MANAGEMENT MEMOS

A collection of timely tips, quotations, and inside slants on management and industrial developments, along with a run-down of events and trends of use to the purchasing agent.

What Price Profits?

It's about time businessmen stopped using "sweet sounding phrases about the good works of our corporate entities to cover up the fact that we're in business to make a profit," says Joseph R. Conrad, president of S&C Electric Co., Chicago.

Conrad put it this way at the Chicago meeting of the American Power Congress: "Will we seek profit with pride, or will we apologize for profit? Will we cloak the notion of profit with sugar-coated labels and disguise our quest for profit with half-hearted apologies? Will we face our stockholders, our customers, our suppliers, our employees, our general public and proudly admit to them that the primary purpose of our corporate endeavors is to provide a useful service or product at a reasonable profit?"

The real danger to business lies in such immoral practices as tax evasion, payola, expense account padding, rigged prices, and speculation—all of which are encouraged by high taxation and business inefficiency. These practices—rather than profits—are the major stumbling block to economic growth in the sixties, says Conrad—because they divert the businessman's attention from producing real wealth.

How to Find a Leader

You've probably read about the discovery of a new kind of atom, called anti-matter, that destroys ordinary atoms when the two come in contact.

Well, management scientists now have come up with an anti-manager—an imitation executive who's just aching to ruin a good job for the real executive, just like anti-matter. Seems this fellow consistently pictures himself as a hard-working executive, whose sole aim is to get the job done. He breaks his arm patting himself on the back for being a real leader, who's running the show.

This boastful character turned up in a test of 400 supervisors conducted by nine psychologists at Michigan State University. The test showed the real leader, or good manager, to be more modest. He doesn't view himself as being constantly busy, or always getting the job done. However he does find his work interesting and occasionally even takes some home. He also considers himself the natural leader of his group.

Visual Value Analysis

A P.A. for an office equipment manufacturer keeps a peg board display over his desk, with samples of all the parts he buys. Most are small metal or plastic castings, stampings, or extrusions—easily displayed on a small board. He calls the display his "Value Analysis Visualizer."

Whenever a salesman comes in, the P.A. points to the display and asks, "Can you make this cheaper?" The display pays off in numerous suggestions by salesmen for use of substitute materials or better manufacturing processes.

One example of a saving resulting from a supplier tip: The cost on a special metal gear was reduced from \$1.25 per unit to 7¢ by going to molded nylon.

Life Among the O-Men

A project group in a large corporation recently completed a difficult task with excellent results. Everything went off according to plan, and the company saved a great deal of money. But when the time came to pass out laurels for the job, nobody wanted to accept any individual credits.

Chorused the committee of Organization Men: "We aren't responsible for the job to any greater degree than anyone else in the company. It was an over-all effort—everybody contributed. Besides, we don't want to offend anyone who wasn't in on the project. It might make him feel bad."

How far can the leveling process go?

Education of a Salesman

A common complaint of P.A.'s is that salesmen don't know enough about the technical and engineering features of their products. To remedy this lack, Clarkson College of Technology, Potsdam, N. Y., now is offering a sales engineering course—with roughly half the curriculum in engineering, science, and math; a quarter in humanities, and the rest in business administration.

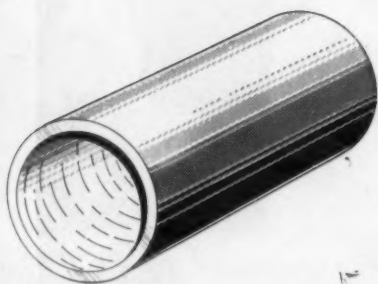
In addition, students get valuable off-campus experience with industrial distributors, making calls with salesmen. And once a year, the graduating class will be guests of the Central New York's Purchasing Agent's Assn. at a meeting.

The idea has been enthusiastically received in many quarters—dealer groups have contributed some financial support, and McGraw-Hill's Industrial Distribution magazine has donated a scholarship. So far, the three graduating classes have numbered 13, 17, and 32, and the average starting salaries range from \$450 to \$580 per month.

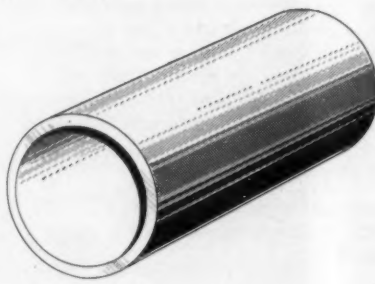
Short Pointer

If you should drop into the plant dining room and find a new menu with strange numbers (ranging from 300 to 750) after each course, don't jump to the conclusion that the menu is now in rubles or yen. The numbers aren't prices, they're calories. Probably a gentle hint from the medical department that desk commandos should go light on lunches; calories are more important than prices.

WHAT VALUE ANALYSIS CAN DO FOR YOU



BEFORE ANALYSIS: Super-finished tubing used for relay housing needed broaching operation to eliminate tiny radial marks inside tube.



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Do you try to deal with more than one source of supply on the same product or commodity?



C. W. Manning, assistant purchasing agent, Climax Molybdenum Co., Mines Park, Golden, Colo.:

"We feel it is to our advantage to have more than one source on all products wherever possible. It promotes good healthy competition in quality, service, and price. By being a customer worthy of consideration with two or more sources, we feel we have a better chance of fulfilling our requirements in times of short supply brought about by strikes, manufacturing breakdowns, floods, etc.

The volume of purchases for each product has a great influence on the number of sources of supply. Too many sources on low volume items, however, lead to loss of quantity price breaks and lack of consideration from any of the suppliers. Also, we believe we must be considerate of the suppliers in not spreading our purchases over too many sources."



R. W. Tomlinson, senior buyer, Alpha Portland Cement Co., Easton, Pa.:

"In buying for eight plants spread over the Eastern half of the country, we find multiple sources provide many advantages. We assure ourselves of a continuous supply since many of the suppliers serve one or more of our plants. We can draw from the closest sources to our plants, effecting freight savings. The healthy competition improves the service offered to us. Finally, we believe we are better protected against uncertain supply."



E. O. Schramm, director of purchasing, Clarostat Mfg. Co., Inc. (resistors), Dover, N. H.:

"A purchasing man would be foolhardy to put all his eggs in one basket. On many production items that we buy in large volume and that are repetitive every 30 to 60 days, we have as many as three sources. Having two or three sources not only protects your company against shortages, but greatly helps you control your prices more competitively. Many standard maintenance items and housekeeping supplies can be handled on

a single source, but here again multiple sources should be encouraged. At the same time, orders should not be spread too thin; this can result in vendor indifference. Always keep your company in the vendor's eyes as a valued customer."



J. M. Bushnell, purchasing agent, Pacific States Cast Iron Pipe Co., Provo, Utah:

"Yes, generally, I do try to deal with more than one source of supply. A company with more than one supplier can effectively hedge against strikes, equipment failures, and material shortages that occur within the supply organizations. Assuming price, quality, and service are equal, the use of more than one source of supply is a reminder to each supplier that there is competition and the purchaser is constantly searching for better value. A single source

of supply can be justified in situations where factors such as quality, availability, service, and price are not equal."



J. B. Turtle, purchasing agent, Ideal Cement Co., Denver:

"We believe it advisable, often imperative, to deal with more than one source for the majority of our purchased products. Contractual arrangements with one source may be preferred under some circumstances for raw materials, but even then contracts with a secondary source are important. Multiple sources for MRO and regularly purchased commodities bring us many advantages through assured supply, competitive prices, better technical assistance, and corporate good will. Also, because of today's ever increasing product improvements, we feel it is essential to remain alert to the possibility of expanding our source of supply lists to take advantage of better purchase opportunities."

THE NATIONAL SCENE



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Normal stocks average 30 of the most used grades including glass base, major paper and cotton base grades and those meeting Mil-Specs.



Extruded Nylon Rod is stocked in diameters from 1/8" to 2". Nylon fabricated parts can be specified in an almost limitless variety.



Commercial Fibre, used in a broad range of applications, available in sheets, 1/8" to 2 1/2" thick. Colors: red, black or gray.



Rod in diameters from 1/8" to 2" in stock. Strip, from .020 to .093 thick up to 7" wide, special extruded shapes to order.

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Milwaukee BRoadway 6-6995
New Haven LOcust 2-3594
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Pittsburgh FAirfax 1-3939
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Seattle MEIrose 2-7298
Wilmington OLYmpia 5-6371

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Montreal AVenue 8-7536



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These Men Will Head NAPA's Nine Districts

Voting results are now all in from the nine NAPA districts.

District 1 was the first to select a vice president back in the beginning of March, while District 2 was the last to report in on its recent election.

Service as a national director is a prerequisite for the district vice president posts. These newly-elected men all have one common characteristic—a background of active and interested participation in association affairs.

Here's the lineup on NAPA district vice president for the 1960-61 term:

DISTRICT 1

Transplanted Idahoan **Kenneth A. Schmitz** rates the distinction of being one of only two Oregon Assn. members to win the group's annual trophy for membership building



and attendance. Schmitz, who once followed the buttermaking trade, is purchasing agent for E. J. Bartells Co., Portland. Currently completing his term as Oregon's national director, he succeeds R. S. Hill, Arizona Public Service Co., Phoenix.

DISTRICT 2

A 30-year veteran at American Electric Co., Wichita, farm-bred **William C. Adamek** rose from stock-room helper to vice president—director of purchasing. He is a charter member and former president of the Wichita Assn. Adamek was vice general conference chairman of the 1958 Southwest Purchasing Conference. Active in scouting and a former school teacher (a four-year stretch), he follows F. L. Scott, Baker Oil Tools, Inc., Houston.



DISTRICT 3



Rock Island, Ill., in the post.

Harold J. Jungbluth, District 3 vice president, is Waukesha manager for RT&E Corp., Waukesha, Wis. He replaces W. M. Davis, Rock Island Steel Div., Macomber, Inc.,

DISTRICT 4



Central Michigan Assn., he is vice chairman of the district's professional development committee. He succeeds J. M. Berry, Kennedy Tank & Mfg. Co., Indianapolis.

Glenn L. R. Blumhardt, former sales manager, Redmond Co., Inc., is now vice president and director of purchases for the Owosso, Mich., firm. A past president of the

DISTRICT 5

Clinton Bishop and his wife have chalked up 19 American Cocker Spaniel champions in the last 12 years of raising and breeding these dogs. He is purchasing agent in charge of purchasing and stores, Alan Wood Steel Co., Conshohocken, Pa. He replaces Paisley Boney, J. P. Stevens & Co., Inc., Greensboro, N. C.



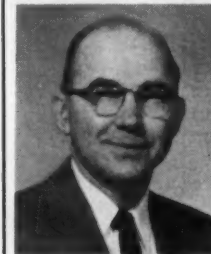
DISTRICT 6



His NAPA membership dates back to 1937 when he joined the Eastern New York Assn. Now national director for the Pittsburgh Assn., he replaces C. Warner McVicar, Rockwell Mfg. Co., Pittsburgh.

Ardent golfer **Augustus Baldwin Wadsworth** is manager of the Raw Material Construction and Equipment Department, Allegheny Ludlum Steel Corp., Pitts-

DISTRICT 7



Temple, works P.A., Allis-Chalmers Mfg. Co., Gadsden, is serving a second term as national director due to a resignation. He succeeds S. L. Jackson, Humphreys Gold Corp., Jacksonville.

Cloice E. Temple lives 60 miles from Birmingham where the Alabama Assn. meets and in nearly seven years as a board of directors' member has had perfect attend-

DISTRICT 8

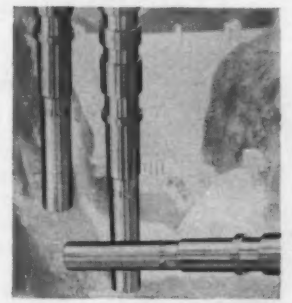
Frederick C. Esser is purchasing agent for the Lamp Div., Westinghouse Electric Corp., Bloomfield, N. J. A college athlete—he played intramural football and was captain of his track team—Esser was the North Jersey group's first president, and is now



DISTRICT 9



A former high school principal, **Herbert Layport** is manager of purchases, Worcester Plant, Wyman-Gordon Co., Worcester, Mass. An active New England Assn. member since 1944, he has been district chairman of the national committee for public relations the past two years. Layport takes over his new duties from E. E. Michaelson, Atlantic Wire Co., Brandford, Conn.



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Your J&L stainless steel distributor can serve you better because J&L serves him better, backing him with the full facilities of J&L's Stainless and Strip Division.

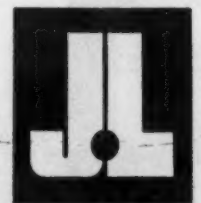
Your J&L distributor can reduce your costs by providing a complete range of pre-production services, and doing it economically! He can save you the capital investment required to maintain long term inventories; he can help you eliminate the costs of overhead connected with stocking, accounting, and the inevitable losses incurred through waste and obsolescence due to specification changes.

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Your J&L distributor is as near as your telephone. Call Western Union Operator 25 for the name of your J&L distributor of Consistent Quality stainless steel.

J&L — a leading producer of stainless steel and precision cold rolled strip steels



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To get everything you need in washers — on one order — it pays to specify "Milwaukee Wrot" on every washer requisition you write. One word tells the reason why: Specialization.

Milwaukee is the one prime source that has devoted more than 70 years to the volume production of quality washers. Special machinery — special production techniques — special facilities — special quality controls combine to make Milwaukee Wrot Washers the unmatched standard of superiority, the world over.

Whether your need is for "standards" or "specials," the complete Milwaukee line offers unrestricted selection. Factory stocks covering thousands of types and sizes, plus over 100,000 production-ready dies, make it unnecessary for you to tie up capital in long-range inventories.

TYPES AVAILABLE

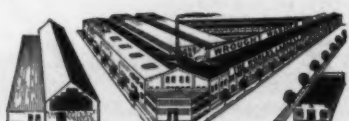
- Manufacturers Standard Size Washers
- SAE Standard Flat Washers
- Belleville Type Washers
- Sems Washers
- Narrow & Wide Rim Machinery Bushings
- Light Steel & Riveting Washers
- ASA Lock Washers
- Spring Tension & Wave Bend Washers
- Army-Navy Standard Washers
- Machine Screw Washers
- Axle & Carriage Washers
- Structural Washers
- Countersunk Finishing Washers
- Flat & Bevel Square Washers
- Drawn Center Washers
- Bedspring & Mattress Washers
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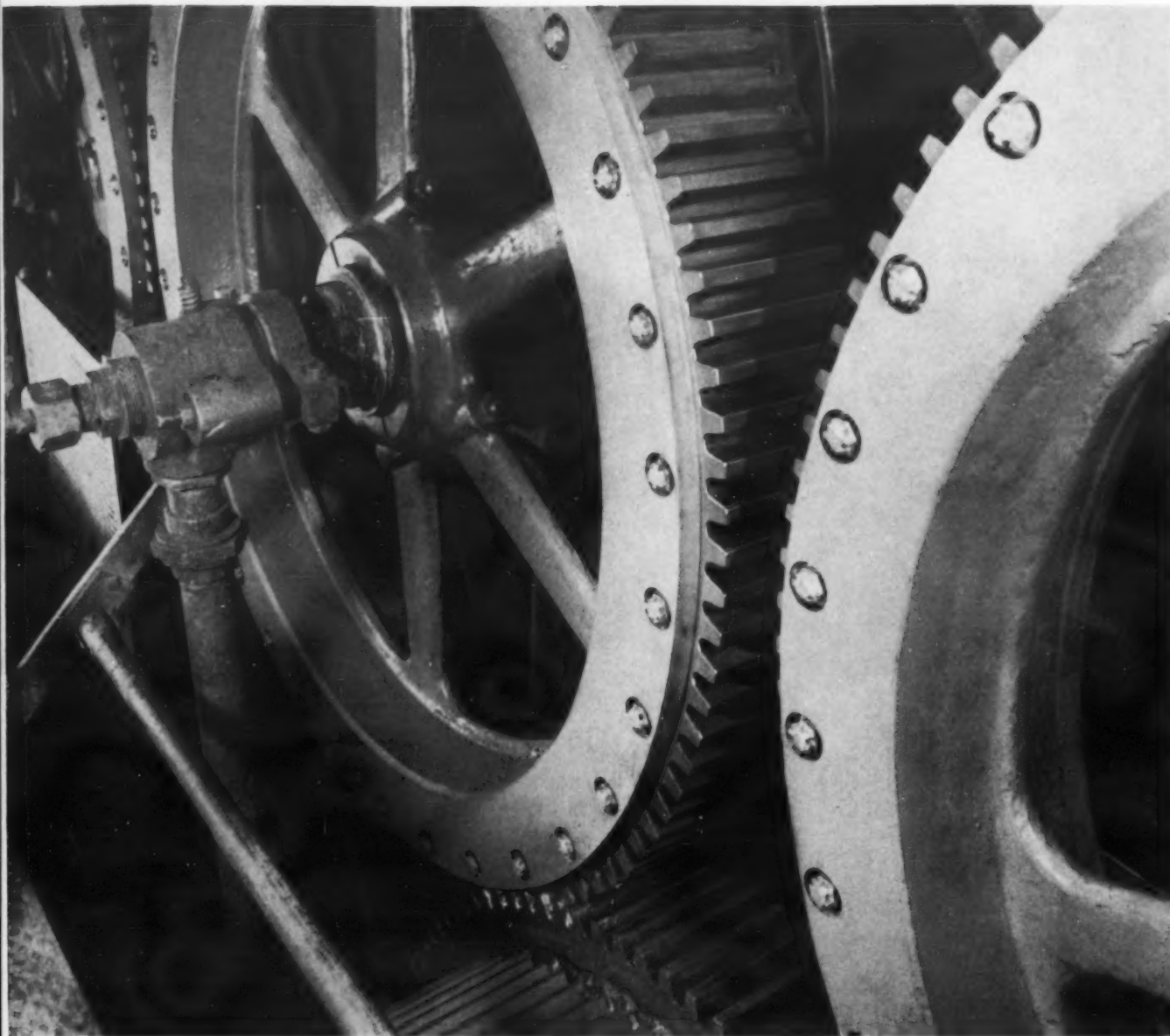
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GEARED TO THE FUTURE—These gears or gear rims used to replace cast iron dryer gears on #5 paper making machine at St. Regis Paper Company's plant at Deferiet, New York, were machined from 6" sheet stock of Panelyte grade 905. The outside diameter of the wheel is 54-7/16". The Panelyte rims have a 6" face with 112 teeth, a 1½" circular pitch on a 53-31/64" pitch diameter. These gears greatly reduce noise and machine vibrations thus improving working conditions and lowering general maintenance costs. Damaged gears are easily replaced by simply substituting a new gear ring instead of replacing the entire hub, arms and rim as was necessary with metal gears. The Panelyte is highly resistant to shock and has excellent machining characteristics. One of the important materials used in the fabrication of these Panelyte phenolic laminates is Mount Vernon Duck.

This is another example of how fabrics made by Mount Vernon Mills, Inc., and the industries they serve, are serving America. Mount Vernon engineers and its laboratory facilities are available to help you in the development of any new fabric or in the application of those already available.

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Data You'll Need to Buy Typewriters

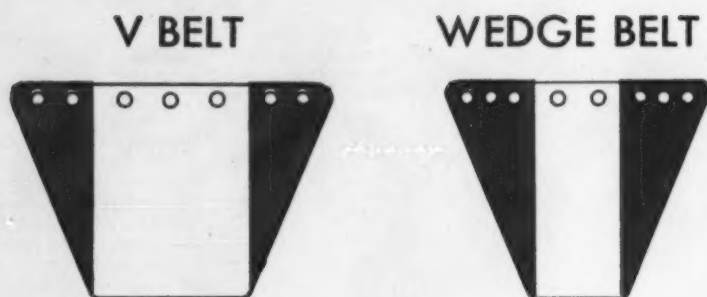
	Model	Price*	Guar.	Cost of Service Contract (yr.)	Size (W-L-H)	Weight (lbs.)	Colors	Maximum No. Carbons	Carriage Lengths Available	Types Available	Special Features Available
STANDARD OFFICE	OLIVETTI Diaspren	\$225-355	1 yr.	\$20	12¼ x 15½ x 9½ in.	34	ice blue	12	12, 15, 20, 24, 28 in.	Elite, Pica, Lettera, Gothic Elite, Gothic Pica, Elite Italic, Pica Italic, Mikron, Perla, Avvisa	type jam release key, automatic and manual margin stops, vertical or horizontal half spacing, automatic line finding mechanism, paper deflectors and card holder, four position ribbon control
	OLYMPIA 561	\$225	1 yr.	none	12½ x 15 x 10 in.	38	green	12	12, 13, 15, 18, 24, 36 in.	Pica, Elite	keyboard has 92 characters—four bonus keys, with symbols, (no charge) carbon ribbon attachment available
	PAILLARD Hermes Ambassador	\$225-340	1 yr.	none	18 x 17½ x 10¼ in.	35	green	10	12, 13, 15, 18, 24 in.	Pica, Elite, Director Pica, Director Elite, Techno Pica, Techno Elite	foreign keyboards, interchangeable carriage, dual ribbon feature, decimal tabulation
	Hermes Standard 8	\$180-210	1 yr.	none	11¼ x 14¼ x 8¼ in.	28	green	8	12, 18 in.	Pica, Elite, Director Pica, Director Elite, Techno Pica, Techno Elite	decimal tabulation, foreign keyboards at additional charge
	REMINGTON Standard	\$225	1 yr.	\$16	12 x 14 x 8½ in.	31	gray, green, beige, blue	12	11, 13, 15, 20, 27, 32 in.	Over 100	interchangeable type, front feed platen, 10-key decimal tabulator, stroke counter
	ROYAL McBEE FP	\$225	1 yr.	\$16.20			gray, blue, green, pink	8	11, 13, 16, 21, 27, 33 in.	75	special symbols, check writing attachments, special forms, form writers, front feed, payroll devices
	SMITH-CORONA MARCHANT 62E Secretarial	\$225-355	1 yr.	\$16.20	16 x 17¼ x 9¼ in.	31-44	alpine blue, seafoam green, charcoal gray, deluxe gray, platinum gray, desert sand, coral pink	6-12	11, 13, 15, 19, 21, 27 in.	80	carbon ribbon, 10-key decimal tabulator, repeat action keys, 92 character keyboard, interchangeable type, approx. 400 keyboard arrangements and extra symbols, palm tabulator, all types of platens
ELECTRIC	UNDERWOOD Touch-Master II	\$225-355	90 days	\$16.50	13½ x 14½ x 9½ in.	23-40	gray with choice of 8 colored front panels	12	11, 13, 15, 20, 27 in.	244 keyboards, 140 type styles in English and foreign languages	6-8-10-12-16 pitch, various platens and attachments
	IBM Electric	\$445	3 mo. (1 yr. on motor)	\$35	16½ x 16½ x 9¼ in.	46	opal gray, emerald green, topaz bronze, sapphire blue, garnet rose, onyx blue	20	13, 17, 20, 24, 30 in.	46 type styles including Pica, Elite, Courier, Bookface Academic, Prestige Elite, Prestige Pica, Manifold #10	carbon ribbon feed, pin feed platen, changeable type bars
	Executive (Proportional)	\$625	3 mo. (1 yr. on motor)	\$39.50	16½ x 16½ x 9¼ in.	48	opal gray, emerald green, topaz bronze, sapphire blue, garnet rose, onyx blue	20	13, 17, 20 in.	16 type styles, including Modern, Arcadia, Bold Face, Secretarial, Documentary	(same as above)
	OLIVETTI Lexikon	\$395-525	1 yr.	\$35	15 x 19 x 10 in.	63	gray	20	13, 18, 27 in.	Elite, Pica, Lettera, Simplicitas, Gothic Elite, Gothic Pica, Elite Italic	automatic and manual margin stops, individualized impact control, two carriage return controls, repeat back space key, four keyboard repeat keys, decimal and standard tabulation keys
	REMINGTON Electric	\$445	1 yr.	\$38	15½ x 15 x 10½ in.	50	gray, green, beige, blue	15	13, 15, 18, 20, 27 in.	Over 100	interchangeable type, manual back-spacer, front feed platen, 10-key decimal tabulator, stroke counter
	Statesman (Proportional)	\$625	1 yr.	\$43	15 x 16 x 12 in.	52	gray, green, beige, blue	15	13, 15, 18, 20, 27 in.	8	(same as above)
	ROYAL McBEE HE	\$445	1 yr.	\$35			oyster white, pearl gray, sapphire blue, mist green, petal pink	12	13, 16, 21, 27 in.	75	special symbols, carbon ribbon and fabric ribbon at no extra cost
	SMITH-CORONA MARCHANT 3EE	\$445-545	1 yr.	\$34.50	17 x 19 x 10 in.	46-58	alpine blue, seafoam green, charcoal gray, deluxe gray, platinum gray, desert sand	10-16	13, 15, 21, 27 in.	80	carbon ribbon, 10-key decimal tabulator, repeat action keys, 92 character keyboard, interchangeable type, approx. 400 keyboard arrangements and extra type symbols, palm tabulator, all types of platens
	UNDERWOOD Documentor	\$445-545	90 days	\$37.20	14 x 14 x 10 in.	46-65	gray with choice of 8 color front panels	20	13, 16, 21, 27 in.	277 keyboards, 140 type styles in English and foreign languages	carbon and fabric duplex (no extra charge), interchangeable type bars, special platens

* Price varies with carriage length (Federal Excise Tax of 6% not included)

An important Worthington message about

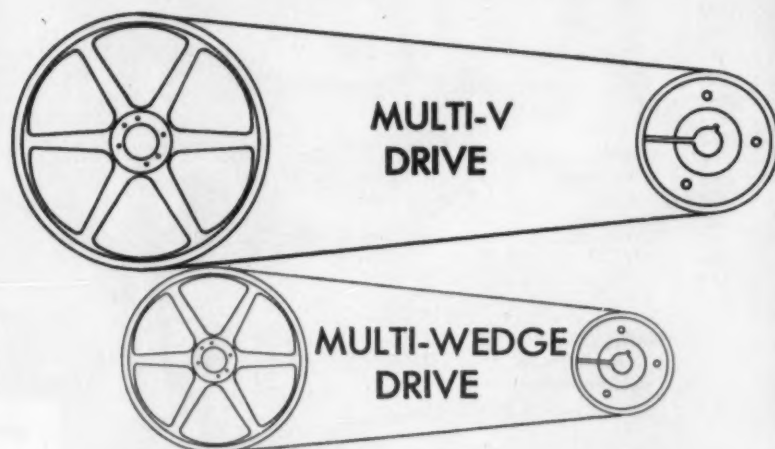
THE COMING CHANGEOVER FROM

Recently you may have seen a number of announcements promising "super" V-belt drives that are considerably smaller and less expensive. What these manufacturers are talking about, of course, is the new Wedge belt which will soon replace conventional V belts for new belt



Q. What is a Wedge belt?

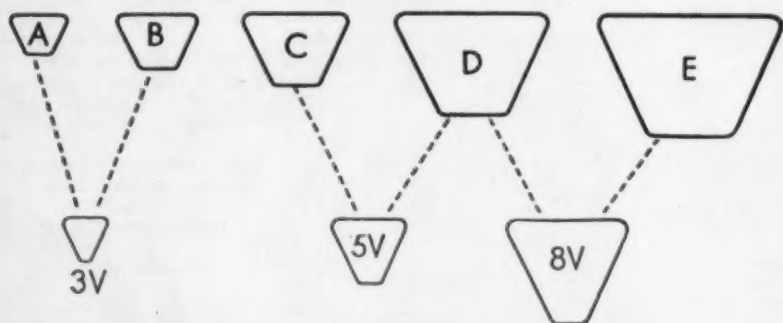
A. The cord layer near the top of a V belt carries the load. This layer, however, is only efficient in the portion supported by side walls (red areas). Because it is more of a pie shape, a Wedge belt increases the overall efficiency of a V belt. The Goodyear Tire and Rubber Company (manufacturer of Worthington-Goodyear V belts) was the first to offer a Wedge belt (in 1948). This fine product, however, was sold primarily for automotive applications.



Q. What are the advantages of Wedge belts?

A. Smaller size, lower cost. Because the new Wedge belts are more efficient, you need fewer belts and smaller sheaves to carry the same horsepower load. Sheave diameters can be reduced 30 to 50%. Center distances can be cut 20%. And initial cost can be as much as 20% less.

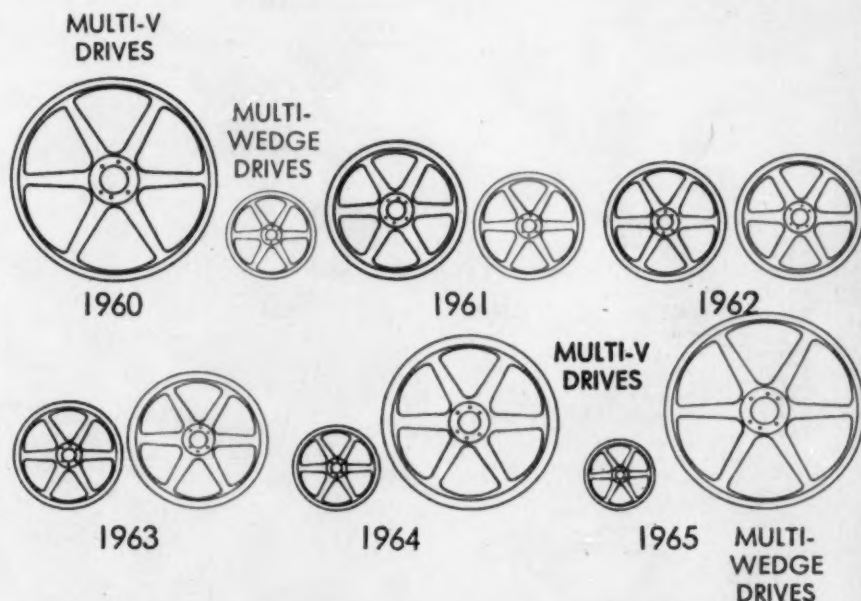
V BELT SECTIONS



WEDGE BELT SECTIONS

Q. What belt sizes will be available?

A. Since the smaller Wedge belt does more work than the other V belt, it has been possible to reduce the number of sizes without loss of flexibility. The new Wedge belts will be available in three standard sections, 3V, 5V and 8V. The new nomenclature simplifies identification. The 3V belt is three eighths of an inch in width (measured at the top); the 5V belt is five eighths; the 8V belt, eight eighths, or one inch. Stock 3V and 5V sheaves will cover horsepower ranges up through 200 hp. Made to order 8V sheaves will be used for 200 to 2,000 hp. requirements.

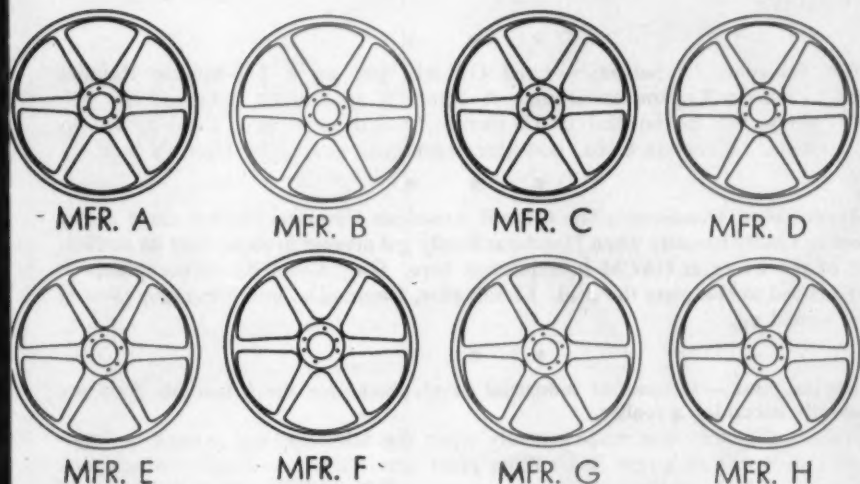


Q. Will multi-V drives continue to be available?

A. Worthington has no intention forcing any customer to switch to the new Multi-Wedge drive. The choice is up to you. We will continue to manufacture and stock both drives as long as there is a demand for both. We expect that many customers will need replacement belts and sheaves for Multi-V drives for many years. The chart above indicates how we expect the market to be divided in the years ahead.

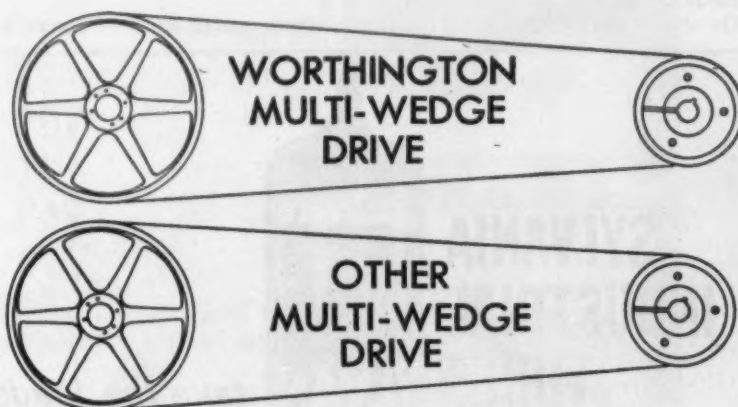
MULTI-V TO MULTI-WEDGE DRIVE

drive applications. On these pages Worthington—maker of the QD (Quick Detachable) sheave, the industry's largest seller—explains the significance of the coming change-over. If you would like more information please write to Worthington Corp., Section 79-25, Oil City, Pa.



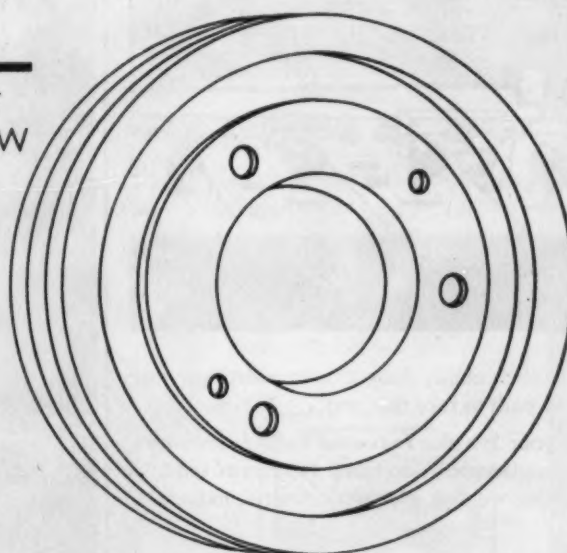
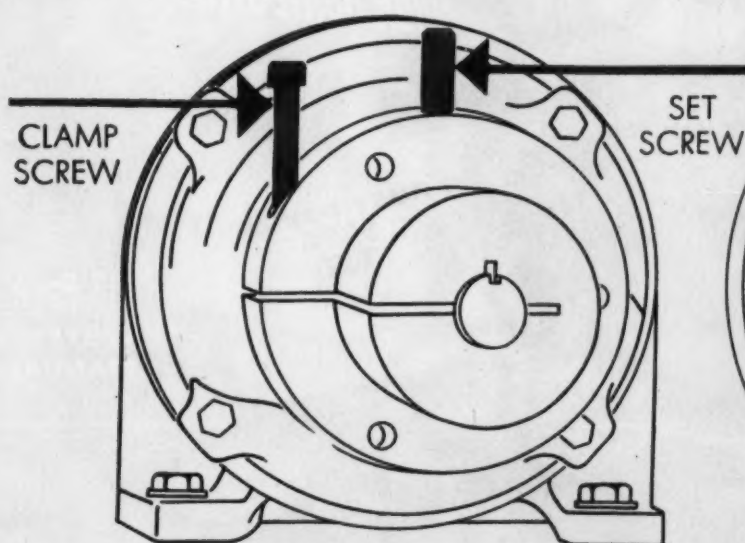
Q. Will all drive manufacturers make the changeover?

A. All indications are that the majority of Multi-V drive manufacturers are going to switch to the new Wedge belts. Of the eight leading builders, five (including Worthington) now also offer Multi-Wedge drives.



Q. Will different brands be interchangeable?

A. So far all Multi-Wedge drives introduced are being offered in the same belt and sheave sizes. Since Worthington and its QD licensees enjoy the largest share of the market, you can be doubly sure of having a dependable source of supply if you buy your Multi-Wedge drives from Worthington. All stock QD sheaves are being built to standardized dimensions by all QD manufacturers and are therefore interchangeable.



Q. Are all Multi-Wedge drives alike?

A. Whether you buy a new Multi-Wedge drive or the older Multi-V drive, the major difference between brands will be the quality of the belt and the method of locking the hub to the shaft. Worthington QD (Quick Detachable) sheaves, with their two Golden Screws are preferred by plant operators because of their positive locking arrangement.

The clamp screw simplifies installation and assures permanent alignment. You can install QD sheaves one part at a time. No heavy rim and

hub combination to inch delicately into place. If change in speed is required, you simply install another sheave on the hub which remains anchored to the shaft. The clamp screw is an exclusive Worthington feature.

The set screw prevents "key drift." It locks the key securely in place, avoiding the danger of the key drifting off and becoming a safety hazard. Because of the exclusive clamp screw it is possible to use a set screw without causing hub distortion that might cause eccentric runout.

Foreign Perspective

MAY 9-15

London—With British steel production booming, one of the industry leaders, United Steel Companies, Ltd., has decided to launch one of the most ambitious expansion programs in U.K. history.

The four-year program will cost a whopping \$91-million and up United's ingot capacity by about one-third—from three to four million tons a year, or one-sixth of England's entire ingot production.

The project also will involve:

- Expansion of Appleby-Frodingham Co. ingot capacity from 1.5-million to 1.9-million tons/year.
- Installation of a new 300,000-ton capacity rod-bar mill at its plant here.
- Redevelopment of its Samuel Fox & Co. melting and rolling facilities to raise output from 400,000 to 500,000 tons/year.

Paris—The old economic adage about American sneezes causing European pneumonia doesn't seem to be true anymore.

Despite a relative slowdown in the U.S. nonferrous metals business, the trend for this industry among member nations of the Organization for European Economic Cooperation is definitely up.

On top of record production of all nonferrous metals in 1959 comes a recent

(OEEC) report that shows consumption still way ahead of production. Aluminum, for example, is being ordered at a healthy 98,333 metric tons/month rate—a gain of almost 4,000 tons/month.

Along with aluminum, producers of copper, nickel, lead, zinc, and tin also are reporting overflowing order books—indicative of continued growth in these sectors for at least the rest of this year.

Hanover, Germany—The 1960 German Industries Fair showed visiting U.S. buyers that Europe, and particularly Germany, may soon loom large as a threat for the U.S. electronics industry.

Prohibited from participating in electronics since World War II, Germany marked its re-entry into the field with two outstanding developments:

- **Siemens A. G.**, in conjunction with Westinghouse Electric Co., says it has developed a method to produce "the world's purest silicon."
- **Wacher Chemie, Munich**, has introduced a continuous process for producing "purest" crystallized silicon. The process can be used directly for making transistors.

Johannesburg—De Beers Consolidated Mines Ltd. is upset about General Electric Co. claims of functional superiority for its synthetic crystals.

De Beers thinks it has met the competitive challenge, however, by producing what it claims is a "more efficient natural diamond grit" for metal bond application. The new laboratory-developed grit consists of microscopically selected "unbreakable" particles.

San Salvador, El Salvador—Shell Oil will put up a \$10-million Refining plant to handle Venezuelan crude. A company spokesman indicated the new plant, which will be finished in 18 months, would serve as a stand-by facility for a similar refinery in Cuba, now threatened with seizure by Castro's men.

Tegucigalpa, Honduras—The Central American Common Market came a step closer to reality recently when Honduras finally got around to depositing its ratification of the treaty at CACM headquarters here. Only Costa Rica's acceptance is now needed to complete the deal. El Salvador, Guatemala, and Nicaragua already have signed up.

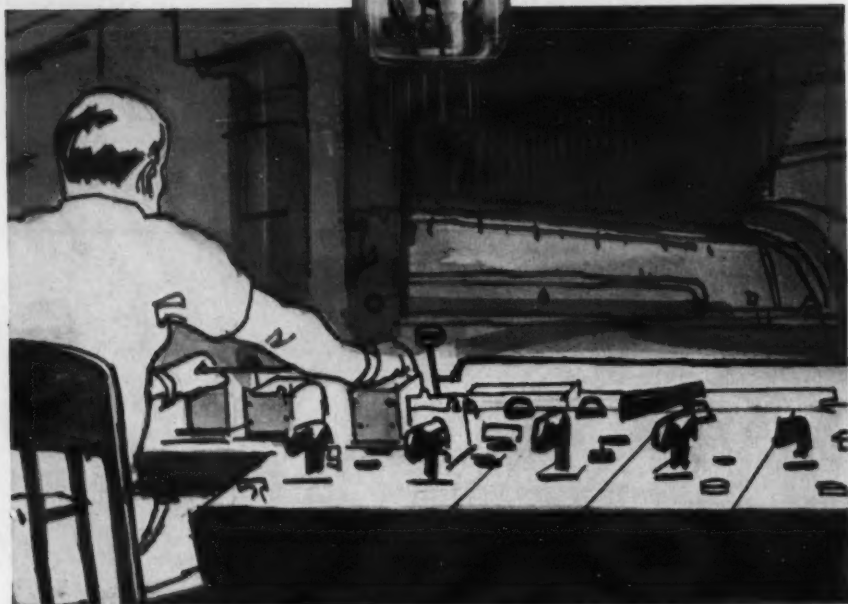
Regina, Sask.—Dreams of industrial development for the Canadian West are gradually becoming a reality.

Industrial history was made recently when the first steel was poured at Inter-provincial Steel Ltd.'s new \$14-million plant here. The new facility, which took two years to build, is Canada's first, west of Sault Ste. Marie, which is capable of pouring steel for plate, coil, and skelp.

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Foreign News In Brief

More Expansion

London—British Ford, which only recently announced a \$196-million expansion program, now says it will spend another equal amount on retooling and on building new design, engineering, and research facilities.

A just-completed five-year program costing more than \$200-million has been highly successful, a company executive said, but still left the firm with a "shocking" inability to satisfy demand.

Machinery for Sale

Warsaw — Metalexport, the Polish foreign machine trade monopoly, is trying to sell \$55-million worth of obsolete metal working machinery to Western buyers.

The Polish government has been sending out sales letters during the past three weeks to leading machine tool buyers, stating that it is trying to dispose of "machinery which we have erroneously obtained during the 1950 to 1956 period."

Gutta Percha Folds

Toronto—Gutta Percha and Rubber, Ltd. is going out of business.

The old-line rubber manufacturer, whose off-beat product—gutta percha—has filled more than 10-million cavities, attributed its foldup to competition from the U. S. and lack of tariff protection.

The company, founded in 1883, has sold its entire assets—including tire production rights and all its other patents—to "individuals" who will distribute these properties "as they see fit."

Hungary Pushes Exports

Cairo—The Arab Pharmaceutical Co., a private Egyptian firm, will begin export of an entire line of drugs under license from a group of Hungarian pharmaceutical companies.

Informed industry sources here say that the Hungarian pharmaceutical industry has met disfavor from Kremlin trade bosses, and is, therefore, turning to licensing agreements with so-called neutralist countries in an attempt to push sales with the West.

CNR Economizes

London, Ont.—A gradual shutdown of Canadian National Railway car shops here was announced by George McCready, superintendant of the shops. The first cut will be made by July.

McCready noted that "it is becoming apparent that in the changing scene it is no longer economical to continue a major repair facility at this location."

Joint Venture

Turin, Italy—Cartiere Burgo of Italy and the Bowater Scott Corp., Ltd., of London have formed a new company here to produce tissue paper products for both domestic and industrial use.

The company, called Burgo Bowater Scott S.P.A., will use the same manufacturing methods and processes of the Scott Paper Co.

in the U.S. and of Bowater Scott Corp. Production will be marketed both in Italy and abroad.

Boost Chemical Goals

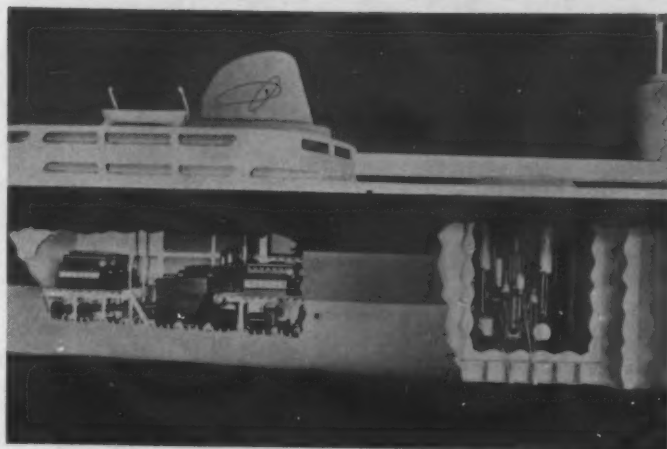
Vienna—Directives for the Second Five-Year Plan for the Hungarian chemical industry (1961-1965) call for doubling production by 1965 compared with 1958 levels. The main production increases will be in artificial fertilizers, plastic materials, and synthetic fibers.

Fiat Designs 51,700-Ton Nuclear Powered Tanker

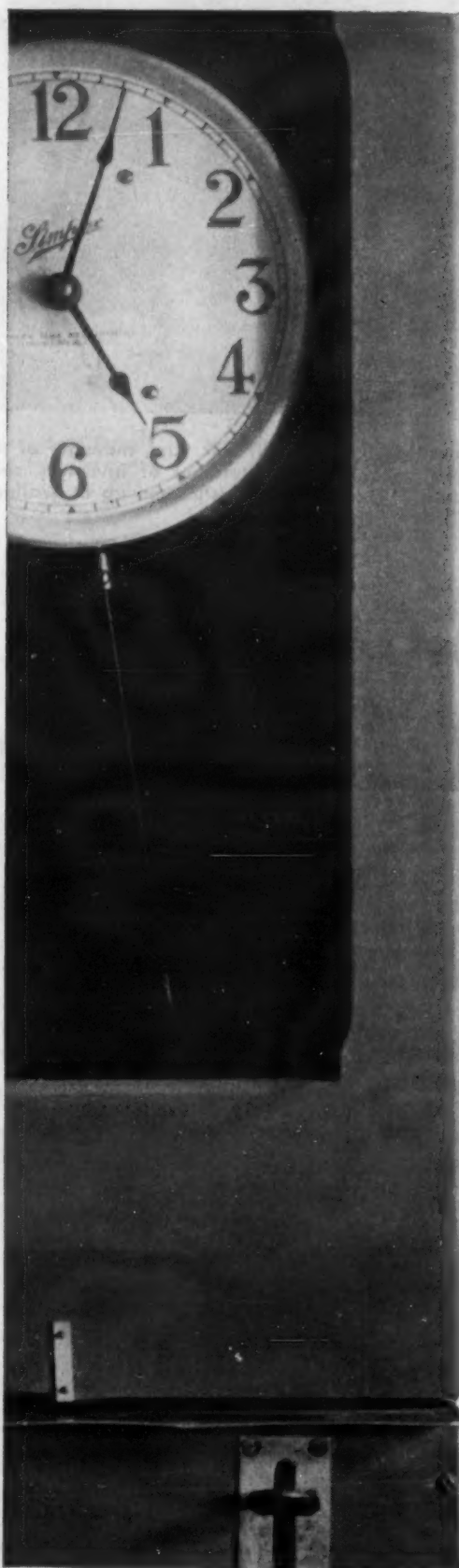
Milan—Fiat, Italy's small car maker, unveiled a model of a 51,700-ton, nuclear-powered tanker at the recent International Samples Fair here. The design was made in conjunction with Westinghouse Electric Corp.

The ship, now under study, would be powered by a 74-megawatt (thermal power) pressurized water reactor shielded by lead and polyethylene, and capable of developing up to 23,000 hp.

A single charge of 6,000 lb. of uranium oxide would drive the ship 195,000 miles.



Cutaway model of Fiat's nuclear tanker.



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W & T THINK SESSION—l. to r., Lloyd Wicks, supt. of materials handling; Miss Irene Gordon, purchasing agent, Elwood Terry, administrative assistant; Thomas T. Quigley, v.p., Equipment Divs.; Donald N. Hale, plant

manager; Frank Saul, manager of production control, and Miss Charlotte Baldwin, manager of inventory control, discuss some typical inventory problems which come up at Wallace & Tiernan, Inc. (see box at right).

Coffee and Conversation:

Here's How One Diversified Firm Swaps Inventory Information the Informal Way

A company whose 3,000 products range from foghorns and chemicals to high precision instruments and bread-baking machinery is bound to have inventory and purchasing problems galore.

How do you solve these problems without getting bogged down in red tape and formal committee meetings?

Wallace & Tiernan, Belleville, N. J., offers a simple recipe: Provide a comfortable room, have a pot of coffee perking constantly—and let the purchasing agent, inventory control man and production, sales and engineering managers drop in anytime they want to chat with each other and with top management officials about problems as they arise. Wallace & Tiernan calls this the Board of Review. The board functions, according to Oscar S. Porter, factory controls manager, to integrate sales projections into production schedules and inventory requirements.

Miss Irene Gordon, purchasing agent, describes it this way: "Engineers give their opinion on new equipment; production men, on materials quality; and marketing people, on delivery schedules. It's a place where most of us gain lots of information."

FROM TOP MANAGEMENT TO P.A.

By such face-to-face communications across the table, as shown in the accompanying photos, purchasing agent Gordon and factory control manager Porter can coordinate sales projections from eight product lines (and 3,000 separate items) with material stocks on hand and needed purchases. Once top management has indicated desired inventory levels, the board of

review maintains them and orders ahead to meet sales forecasts (see PW Apr. 4, '60, p. 29).

As an index of the board's activity, Miss Gordon points to the pile of inventory control cards on the table. Miss Gordon, Porter, and Miss Charlotte Baldwin, manager of inventory control, process between 120 and 150 such cards a day, checking inventory levels, making adjustments and putting through orders for additional stock. About 50 PMO's (purchased material orders for maintenance items, supplies, and tools) are considered, and 100 purchase orders finally come out of the mill to vendors. Miss Gordon passes the cards on to her staff of nine buyers for actual ordering.

CONSULTING SPEEDS DECISIONS

What makes this flexible approach to administration click? For one thing, the problems that come up in W & T's widely diversified product lines require help from nearly every person in management. Problems are continually changing, and the men (and women) responsible need quick answers from co-worker specialists. This puts a premium on speedy solutions, and the board of review offers just such action.

"Very few things that we discuss don't move within 24 hours," says Miss Gordon.

Because it's not a formal committee, there are no set meeting times, and the sessions don't drag on for hours. Nor are there long waits for memos to circulate.

"Everybody can bring up anything and get things settled fast," says Donald N. Hale, W & T's plant manager. "You don't have to go from office to office."

Miss Baldwin agrees. "Someone will always drop in

with the answer to your problem," she says. "As a matter of fact, it's hard to get people together at any other time. The Board of Review meets when most people don't have appointments in their offices."

The board actually dates back 25 years, but because of its flexibility, it has proved just as competent to handle today's complex problems as it was to deal with the high-pressure production problems of World War II. New people join the group whenever needed.

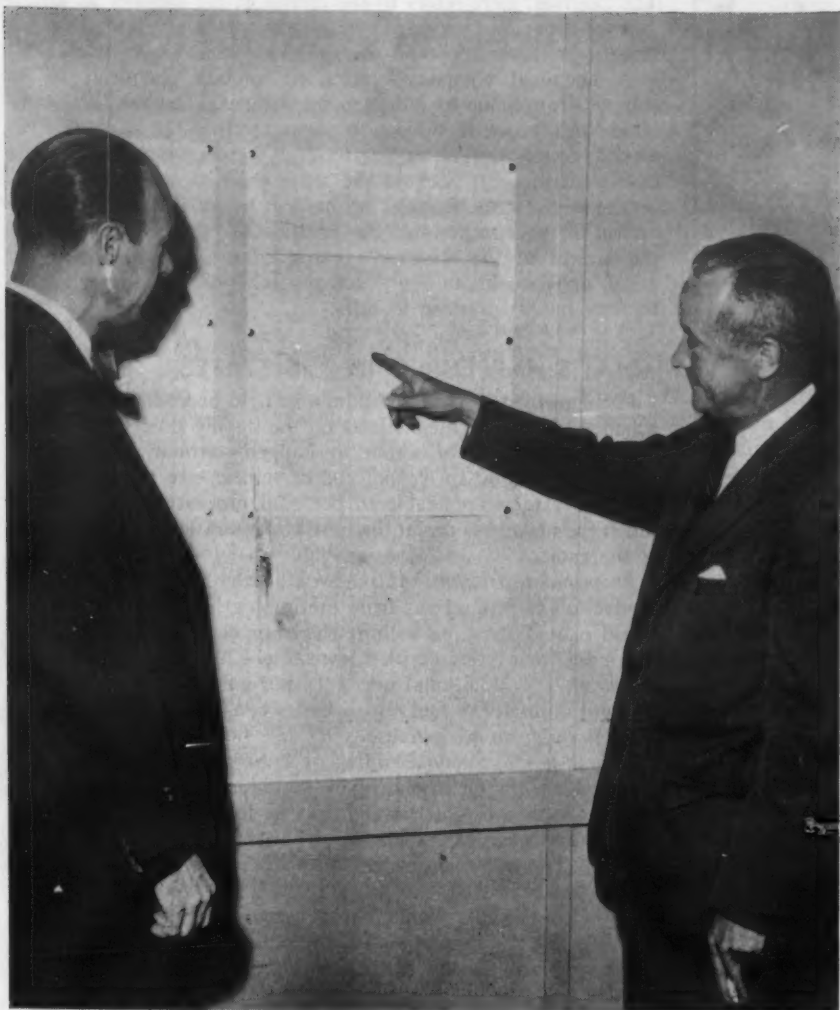
INFORMAL MATERIALS MANAGEMENT

Porter calls it a form of materials management. "The purpose of materials management," says Porter, "is coordination. We have the benefits of it without making any organizational changes. Many companies, because of poor communications, can't get the benefits without having formal materials management departments."

Because the Board of Review is the center of communications in the plant, anyone from Robert Jackson, president, down the line to production supervisors is likely to drop in to have a cup of coffee and join the discussions.

In addition to handling the problems of purchasing, inventory control, production, marketing, finance, and engineering, this verbal back-and-forth over a cup of coffee improves communications between top officials and middle managers. Everyone gets a chance to fire questions—and supply answers.

This gives W & T's chief executives a chance to see their team in action at first hand, and recognition comes sooner for men on their way up.



PINPOINTING PROBLEM—W. & T. President Robert M. Jackson gets inventory briefing from Robert T. Browning, executive vice president.



TEAMWORK—Miss Gordon, Hale, Miss Baldwin, and Oscar S. Porter, manager of factory control, tackle ordering problem.

WHAT THE BOARD DISCUSSES IN A TYPICAL GET-TOGETHER

- (1) Plans for reducing inventory of forms and office supplies.
- (2) Expediting a new system of tabulating orders.
- (3) Completion dates of new products being released to sales products manager.
- (4) Boosting production to meet seasonal peaks.
- (5) Inventory level changes created by new purchase commitments.
- (6) Scrap disposal problems.
- (7) Requisitions for major capital expenditures and unusual materials.
- (8) Determining new re-order point and order delivery lead time.

WIDE RANGE—A diversified firm that produces 3,000 items has varied purchasing and inventory problems. The above list of problems is typical.



SPEEDY SOLUTION—Miss Gordon solves problems brought by Edward Brandis, customer service expeditor, and Porter.

How much do you really pay for TEFLON* ?

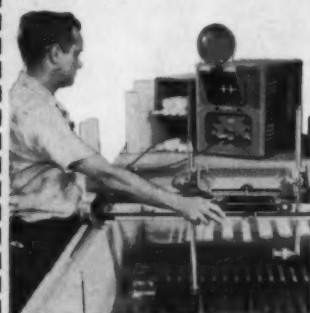


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That's why, when you specify POLYPENCO® you can be sure you get TFE stock shapes with constant electrical and physical properties so necessary for end-product reliability and efficient waste-saving production. Remember this next time you compare Teflon "prices". Quality makes the important difference.

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*DuPont trademark for fluorocarbon resins



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The Fine Print of Purchasing

The LAW and YOU

TO BUY OR NOT TO BUY?

Options are popular with some purchasing agents who like to shop around. Here's how they work:

Seller offers the buyer 10,000 widgets at \$10 each. Buyer thinks this a good price but wants to check a few more vendors—yet doesn't want to take the chance of passing the offer by. So he pays for the privilege of an option. If he decides to go through with the deal, the option payment usually becomes a part of the purchase price. If he passes up the deal, the option money is forfeited.

An option is a continuing offer by which the owner of the goods stipulates with another party that the latter shall have the right to buy the property at a fixed time, within a fixed time or under, or on compliance with certain terms and conditions. An option is not itself a purchase but merely obtains the privilege of purchasing.

The most important characteristic of an option from buyer's standpoint is that it imposes no binding obligation on the person holding the option, aside from the consideration for the option.

Note: The "contract for an option"—the agreement by which the option privilege is created—is subject to all the rules governing other contracts. Thus, it must be definite and certain as to the price to be paid for the property and time it is to last.

CHEAPER BY THE CARLOAD?

When you buy by the carload, how much are you buying?

A contract for the shipment of a carload means the shipment of the quantity which a car of ordinary capacity, used in transporting the particular kind of goods sold, could carry. Some courts hold, however, that where the size of the car is not specified, seller may deliver in any size available. It is best to specify in your agreement the size of the car to be used unless it is fixed by custom in your industry.

Here's what happened to a buyer who didn't specify the size car: A mill and lumber company ordered 40 cars of yellow pine from a supplier without specifying the car size. Buyer cancelled its order and the vendor sued. In determining the plaintiff's damages, the test used by the court was the lumber in an average carload. Buyer argued, without success, the test should be the quantity of lumber in a minimum carload.

Note: Contract providing for delivery f.o.b. buyer's cars means that the seller is bound to deliver a sufficient quantity to fill to capacity the cars furnished by the buyer.

ARRIVAL PROBLEMS

The phrase "no arrival, no sale" in your buy contract means if the goods do not arrive at destination you do not become liable to the seller for the price. By the same token, seller is not bound by his contract to sell the goods to you.

But there's a difference when your contract provides "this order is subject to the arrival of the steamer; no arrival, no sale."

The "arrival" here refers to the arrival of the steamer as distinguished from the arrival of the goods contracted for. The distinction is important as in the following case.

A chemical company contracted to buy chemicals to be shipped from Spain by a designated steamer. The contract stipulated "this order is subject to the arrival of the steamer. No arrival, no sale." The ship arrived but the chemicals didn't. The case went to court because the seller tried to cancel the order.

The decision: Although "no arrival, no sale" referred to the arrival of the merchandise, the addition of "this order subject to the arrival of the steamer" changed the contract. So if the vessel arrives without the goods the seller is not released from liability on his promise to sell.

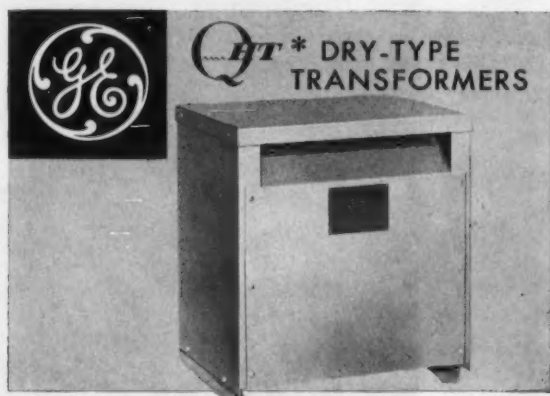
WHAT'S HAPPENING IN THE STATES

Changes in state laws and administrative procedures should be watched closely for their effects on the buying processes. Here's what's happening—or about to happen—around the country.

New legislation: In Nevada motor vehicles are now taxable at whatever rate is applicable to personal property in the area in which the owner resides at the time of registration (formerly taxed at the rate of 4% of assessed value).

Proposed legislation: Alaska would exempt the extraction of production of oil and gas from the mining license tax. Arizona would extend the time within which applications for refund of motor fuel taxes may be filed from 6 to 12 months from date of purchase. An additional tax of 1¢ per gallon on motor vehicle fuel and on highway fuel also is under consideration . . . District of Columbia would increase sales tax rate from 2% to 3%. Maryland would allow the filing of sales tax returns by the last day of each month instead of by the 21st . . . Michigan would change the motor vehicle weight tax as follows: on trucks, road tractors and/or truck trailers, 5¢ per cwt. for weights up to 4,000 lb. (now 5¢ per cwt on weights up to 2,500 lb. and 10¢ per cwt on weights from 2,500 to 4,000 lb.) . . . also, the sales tax on retail sales of autos would be computed on the retail price of the auto less the agreed value of the auto being traded in . . . Mississippi would allow a deduction of 3% as compensation for costs of collection when computing the amount of sales tax due. Another Mississippi tax proposal would authorize municipalities to impose a city sales tax on retail sales at the rate of 1% (now 0.5%) except on sales of industrial gas and electricity which could be taxed at 0.5% (now 0.25%). Another would eliminate the 1/8 of 1% sales tax rate applicable to certain wholesale sales . . . Rhode Island would make permanent the 3% sales and use tax, scheduled to revert to 1% on May 31st . . . Virginia would amend the constitution to provide that no tax over 3% be levied on any sale, rent, furnishment, use, storage for use, or consumption in Virginia of tangible personal property. Would authorize counties and cities to levy sales and use taxes at the rate of 1%.

(The above material was prepared by Sydney Prerau of the J. K. Lasser Tax Institute for PURCHASING WEEK. Reader inquiries on general tax and legal aspects of purchasing will be discussed here in accordance with space limitations and applicability.)



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Quiet High-Temperature units are designed for general light and power service, 600 volts and below. They are available in standard ratings of 1/2 to 500 kva, single- and three-phase, including buck-boost and autotransformers. These transformers have silicone impregnated insulation and low sound levels for industrial and commercial building applications.

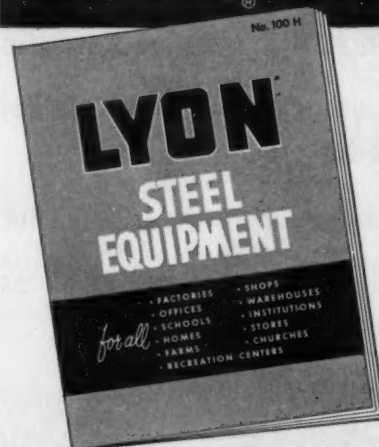
*Reg. trademark of General Electric Co.

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This Changing Purchasing Profession . . .

Jack Wellenberger was named purchasing agent, **Dalmotor Div., Yuba Consolidated Industries, Inc.**, Santa Clara, Calif.

William Underwood joined **Dayton Steel Foundry Co.**, Dayton, Ohio, as assistant purchasing agent. He had been a buyer for Ford Motor Co.

William R. Bloomfield was made chief buyer, raw materials, at **Kaman Aircraft Corp.**, Bloomfield, Conn. **Gilbert E. Smith** became chief buyer, nonproduct supplies.

John S. Anderson joined **Dewey & Almy Chemical Div., W. R. Grace & Co.**, Cambridge, Mass., as assistant purchasing agent.

Edward J. Wink has been promoted from assistant purchasing agent to purchasing agent, **Unit Drop Forge Div., Fuller Mfg. Co.**, Milwaukee. He succeeds **George J. Houting** who moved up to assistant manager for the division.

J. Andrew Ulrich has been advanced to assistant manager of purchasing at **Pitney-Bowes, Inc.**, Stamford, Conn.

J. L. Doyle was made a buyer, foundry products and supplies, West Allis works purchasing department by **Allis-Chalmers Mfg. Co.**, Milwaukee.

D. E. Sodoma's title has been changed from purchasing agent to manager of purchases for **California Portland Cement Co.**, Los Angeles, and its subsidiary **Arizona Portland Cement Co.** His new title involves no change of duties or responsibilities.

Joseph G. Zifchock was appointed standards officer, **Standards and Specifications Div of Purchases, State of Rhode Island**, Providence.

H. Walton Musick has been made assistant director of purchases, **Kerr-McGee Oil Industries, Inc.**, Oklahoma City. He was manager of the office services department.



G. W. ALJIAN

Top purchasing executive **George W. Aljian** retired recently as vice president of **California & Hawaiian Sugar Refining Corp.**, San Francisco.

From 1945 to 1958 he served as director of purchasing, and as purchasing agent from 1933 to 1945. Aljian was editor in chief of the "Purchasing Handbook," published by McGraw-Hill Book Co. in 1958. He is a former president of the NAPA.

Ray Witt has moved up from buyer to divisional assistant purchasing agent, **Ideal Cement Co.**, Denver.

Five changes have taken place recently in **Diamond Alkali Co.**'s purchasing department. **John Mitchell** was named supervisor, supplies section, for the Cleveland firm. **Richard Warren** moved from raw material buyer to supervisor contract section. **Lynn Babcock** succeeds Warren in his former post. **William Hotes** and **David Riebel** were named

electrical supplies buyer and buyer of office supplies and stationery respectively.

Maurice Maher, vice president of **Thermogas Co.**, Des Moines, was made purchasing agent for the firm.

Harry H. Martin has been promoted to corporate director of purchases, **Sylvania Electric Products, Inc.**, New York. He had been general manufacturing manager of **Sylvania Home Electronics**, Batavia, N. Y.

Odell L. Foss was made purchasing agent for the **University of North Dakota**, Grand Forks.

R. W. Massey has been named purchasing agent, **Southern Bakeries Co.**, Atlanta, Ga.

Gerard F. Hart was promoted to materials manager by **Gifford-Wood Co.**, Hudson, N. Y. He will be in charge of production and inventory control, as well as purchasing and traffic. **Allan B. Colby** succeeds Hart as purchasing agent.

Bernard L. Flynn has been promoted from assistant general purchasing agent to general purchasing agent by **Lever Brothers Co.**, New York.



B. L. FLYNN

JERRY ROMARY

Jerry Romary was named purchasing agent and office manager for **Canton Malleable Iron Co.**, Canton, Ohio.

Obituaries

Clarence H. Nicholson, 70, retired purchasing agent for **Brown-Lipe Chapin Div., General Motors Corp.**, Syracuse, N. Y., died April 3.

Edward B. Fiels, 83, oldest member of the PAA of New York, died April 8.

George D. Zackey, 43, purchasing agent for **Philmont Pressed Steel Co.**, Huntingdon Valley, Pa., died April 14.

Vinson Krapfel, 51, head of the purchasing department of the **Consolidated Paper & Water Power Co.**, Wisconsin Rapids, Wis., died April 12.



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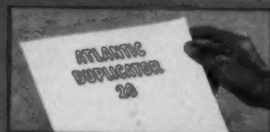
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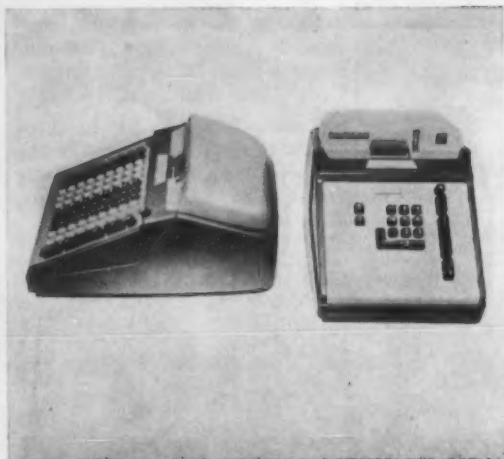
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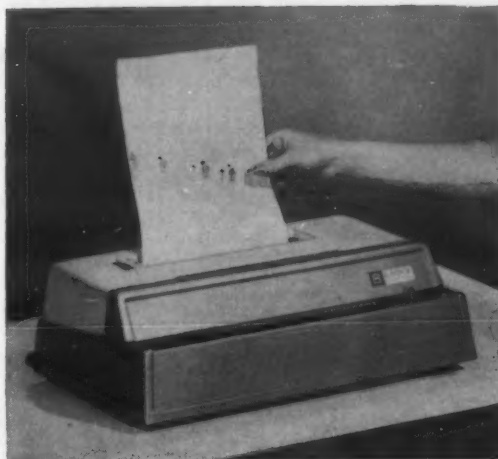
Adding Machine

Has 3 Motor Bars

Adding machine has three motor bars in a vertical row: one for adding and totaling, one for subtracting, and one for adding or subtotaling. System eliminates inessential hand motions. The machine comes in 10-key or full keyboard models.

Price: \$215 to \$335. Delivery: immediate.

Victor Adding Machine Co., 3900 N. Rockwell St., Chicago 18, Ill. (PW, 5/9/60)



Photocopier

Makes Permanent Copies

Machine makes black-on-white copies of letters, invoices, and reports, and reproduces pencil, ink, or crayon notations. Copies will not fade from age, heat, or light. Unit can handle documents of legal size length, up to 9-in. wide.

Price: \$99.50. Delivery: immediate.

A. B. Dick Co., 5700 W. Touhy Ave., Chicago 31, Ill. (PW, 5/9/60)



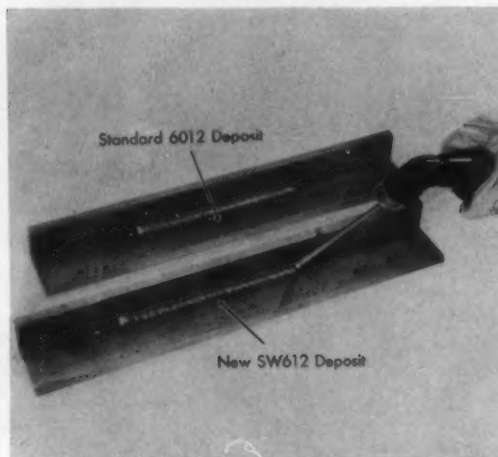
Lamp

Magnifies and Inspects

Swivel shade of unit contains 22-watt circline lamp and 5-in. magnifying lens to aid in the inspection and assembly of small parts. The head of the unit swivels 354 deg. for positioning adjustments that provide glare-free lighting without distorting the magnified image.

Price: \$36. Delivery: immediate.

Swing-O-Lite Inc., 13 Moonachie Rd., Hackensack, N. J. (PW, 5/9/60)



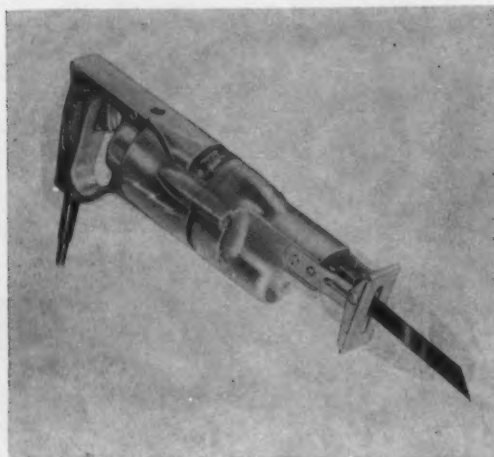
Welding Electrode

Cuts Spatter Loss

Electrode of mild steel, recommended for automotive and general construction welding reduces spatter loss up to 60%, increases crack resistance, and cuts slag removal and cleaning time by half. At high currents, unit improves deposition efficiency by 15%.

Price: \$19. Delivery: immediate.

A. O. Smith Corp., Welding Products Div., Milwaukee, Wis. (PW, 5/9/60)



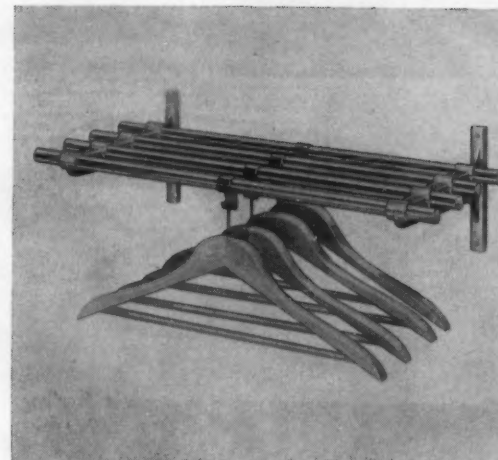
Hacksaw

Runs Electrically

Portable device, weighing 6¾ lb. and equipped with a 110 v. ac-dc motor, saws wood, metal, plaster, or pipe. Recommended for use in constructing or remodeling walls, floors, and ceilings. Blades are available to cut different types and thicknesses of materials.

Price: \$94.50. Delivery: 1 wk.

Milwaukee Electric Tool Corp., 5316 W. State St., Milwaukee 8, Wis. (PW, 5/9/60)



Coat Rack

Saves Space

Wall-mounted rack, appropriate for shallow or confined areas, has coat hangers which are parallel to the supporting wall, and hat shelves of parallel aluminum tubes. The assembly, when fully loaded, projects just 11 in. from the wall. Unit holds coats 4-deep, spaced apart, flush with the hat shelf.

Price: approx. \$15. Delivery: 1 wk.

Vogel Peterson Co., Elmhurst, Ill. (PW, 5/9/60)



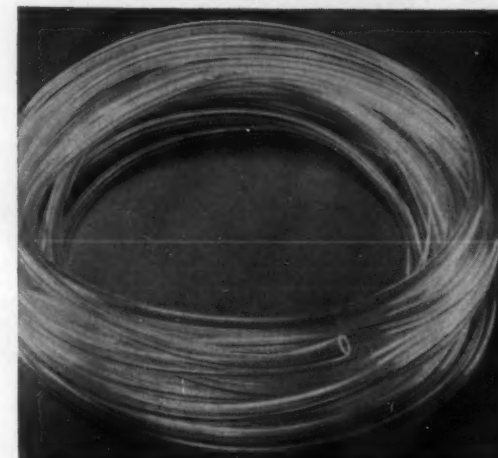
Hot Drink Cup

Has Plastic Band

Paper cup with polyethylene lining has foam plastic outside band that cuts outside cup temperature by as much as 45 deg. compared with the outside temperature level of an ordinary paper cup containing a hot drink of equal temperature.

Price: approx. 1¼¢ each. Delivery: 6 months.

American Can Co., Dixie Cup Div., 100 Park Ave., New York 17, N. Y. (PW, 5/9/60)



Vinyl Tubing

Handles Many Chemicals

Clear vinyl laboratory tubing grips glass or metal tightly and accommodates a wide range of chemicals. Tube's highly polished bore minimizes particle accumulation, and its low surface tension eases drainage. Wall thickness is 1/16 in.

Price: \$3.95 for 50 ft. Delivery: immediate.

Fisher Scientific Co., 717 Forbes St., Pittsburgh 19, Pa. (PW, 5/9/60)

New Products

Another PURCHASING WEEK service: Price and delivery data with each product description.



Extension Cord

Withstands Traffic

Extension cord consists of rubber extension unit with two-conductor rip cord with molded plug at one end and double-outlet receptacle at the other. Ribbed bottom of extension unit grips floor when cord is traveled over. Equipment on casters moves readily over rubber surface.

Price: \$10.50 up. Delivery: immediate.

Ideas Inc., Electriduct Div., 214 Iverson Ave., Laramie, Wyo. (PW, 5/9/60)



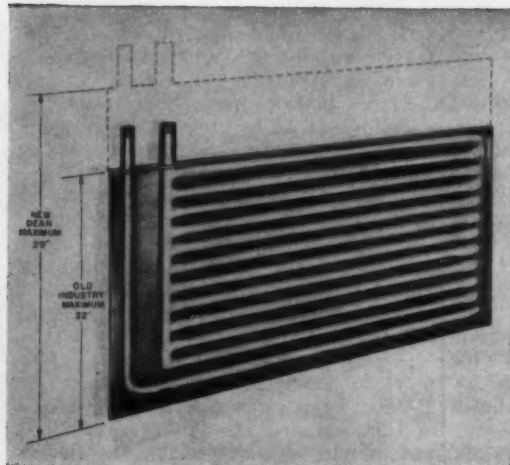
Punch

Makes Hole in Bag

Solenoid-actuated punch makes $\frac{1}{8}$ -in. hole in bag. Unit has adjustable guide to vary hole position, and may be assembled on a wrapping machine, where it can function independently or as an integrated conveyor-fed element in a packaging system.

Price: \$990 to \$1,495. Delivery: 5 to 6 wk.

Ketchpel Engineering Co., West Englewood, N. J. (PW, 5/9/60)



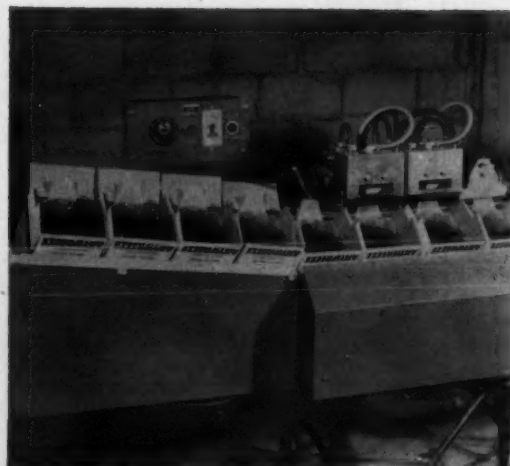
Panelcoil

Replaces Pipe Coil

In 5 standard widths from 12 in. to 29 in., panel-coil replaces pipe coil and integral jacketing at heating and cooling jobs. Panelcoil has a higher Btu transfer rate than pipe coil, weighs less, and occupies less space, in most applications.

Price: from \$31 (12 in. x 35 in., 14 gage carbon steel, double embossed). Delivery: 2 to 3 wk.

Dean Products, Inc., 1048 Dean St., Brooklyn 38, N. Y. (PW, 5/9/60)



Heatsealer

Runs Automatically

Unit automatically heat-seals 3,500 five-gallon, 5,000 one-gallon, or 10,000 one-quart plastic boxes in one shift. In straight line operation, heat-sealer may work in tandem with filling equipment. Combined filling-sealing operation needs just one operator to handle container feed.

Price: approx. \$1,600. Delivery: immediate.

Hedwin Corp., 1600 Roland Heights Ave., Baltimore 11, Md. (PW, 5/9/60)

This Week's

Product Perspective

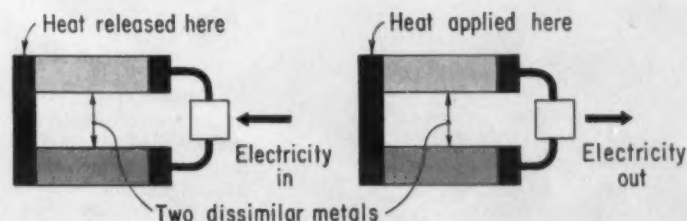
MAY 9-15

Last week's Perspective surveyed four ways to turn energy directly into electricity—this week we take a detailed look at the most promising of the four—thermoelectricity.

• Thermoelectric conversion is expected to have the most immediate product impact of any new direct energy conversion process (thermoelectric, thermionic, MHD, fuel cell). First appearance will be in cooling and heating devices, but large scale power generating equipment and even automobile power are not overly remote possibilities.

The process changes electricity into heat or cold through the mechanics of two old established principles—Seebeck and Peltier. And the entire setup can be reversed to produce electricity from heat.

The "Seebeck effect" was discovered in Germany in 1821 when the scientist found that an electric current flows continuously in a closed circuit composed of two dissimilar metals whose junctions are maintained at different temper-



atures. Some years later, the French physicist Peltier observed the opposite effect: Heat is absorbed at one junction and released at the other when a direct current flows in the circuit. As the above diagram shows, the process can be used either way. The hot terminal can be made to absorb heat (refrigerate) by reversing the current flow.

• Much of thermoelectric research done so far has been for the military. First applications are already out of the design stage: cooling device for submarine refrigerator and a portable power pack for remote areas. The first commercial device on the market will probably be a refrigerator; the initial industrial job—tiny cooling units for computer use. All of the above devices already are out of the lab and should be followed by a full-scale barrage of heating and cooling products before too long.

Over 100 firms are working on thermoelectric products, including Westinghouse, RCA, GE, Whirlpool, and Minnesota Mining. Here's what some of the leaders have in the works:

Westinghouse is working with heating and cooling, but have taken the idea one step farther and incorporated electroluminescent lighting. Their hot-cold panel (composed entirely of solid-state materials) is about one square ft. in area and develops as much light as a 25 w. lamp. It maintains the same surface temperature as a refrigerator, but a flick of a switch reverses the current, raising the temperature to 130 F. Westinghouse sees the principle having unlimited applications in heating, air-conditioning and lighting.

Whirlpool has developed several prototypes including a water purification unit and a freezer. The sandwich still design of the purifier demonstrates the feasibility of thermoelectric distillation of sea water. The freezing device is designed to store frozen pre-cooked meals—heat them up for serving when the current is reversed.

Another Whirlpool unit uses waste heat to generate electric current to operate a Sprengel type mercury pump for gases and liquids. Like Westinghouse, Whirlpool also has a cooling-heating panel composed of a multitude of thermoelements. Its cooling capacity is 600 Btu/hr. with an input of 15 amp.

Pacific Fire Extinguisher Co. has developed a monitored fire protection system that uses a heat detector containing a thermoelectric generator element manufactured by Minnesota Mining & Mfg. Co.

Basco Inc., uses a similar material to power gas appliance control systems, while Elston Co. uses the Basco System in heaters it builds for truck cabs.

Lone Star Gas Co. in Dallas is making a bathroom ceiling heater.

Hamilton Standard is testing a solar-powered generator for space use.

Perkin-Elmer Corp. is developing components for analytical laboratory instruments.

• Present roadblocks to widespread thermoelectric use: high cost and lack of necessary materials. Researchers are hard at work on both problems. Whirlpool reports spending over \$300,000 a year in both 1957 and 1958—says the 1959 total was in the \$400,000 area. At present, a $\frac{1}{4}$ in. thermoelement costs between \$2 and \$2.50, but since the chemical cost in each unit runs only 7¢, it is conceivable that the future cost will drop as low as 20¢.

Your Guide to New Products

(Continued from page 25)



Stopwatch

Registers 60 Min.

Stopwatch registers up to 60 min. of elapsed time on the large red circle around its central shaft. Device has jeweled shock absorbers, unbreakable crystals, fully jeweled escapement levers, and a flat back which prevents it from rocking on laboratory or work table.

Price: \$32.50. Delivery: immediate.

Heuer Timer Corp., 441 Lexington Ave., New York 17, N. Y. (PW, 5/9/60)



Alarm

Gives Loud Blast

Rescue alarm for workers in hazardous situations weighs 2 1/4 lb. and may be worn on belt. Device includes cylinder of nontoxic, noninflammable Freon gas, a trigger, and a horn that sounds a loud, high blast easily heard over heavy noise at long distances.

Price: \$24.50. Delivery: immediate.

Rescue Alarm Co., 84 State St., Boston 9, Mass. (PW, 5/9/60)



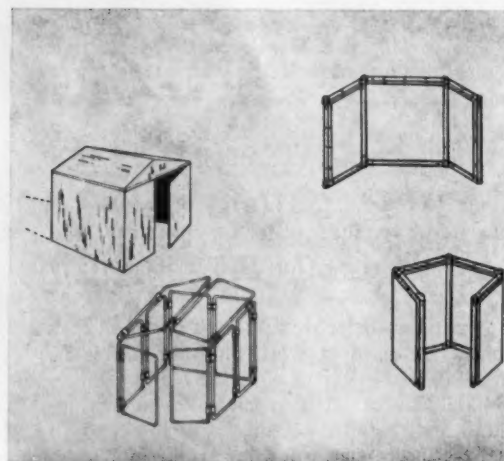
Gear Motor

Has 6 Shaft Positions

Gear motor comes in 10 models with shaft outputs ranging from 10 to 750 rpm. Six screws easily change shaft position to six 30-deg. positions. Universal, shunt, or series motors take input from 12 v. to 220 v. Gear train uses first worm cut right on motor shaft.

Price: \$25 to \$50. Delivery: 30 to 60 days.

Carter Motor Co., 2700 W. George St., Chicago 18, Ill. (PW, 5/9/60)



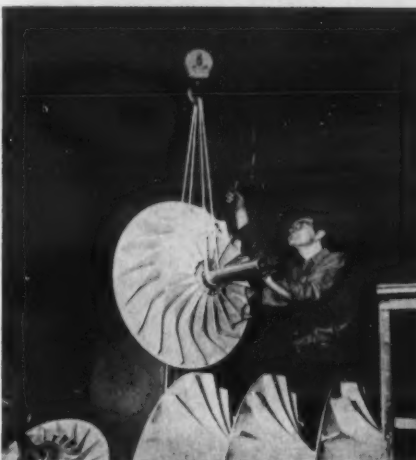
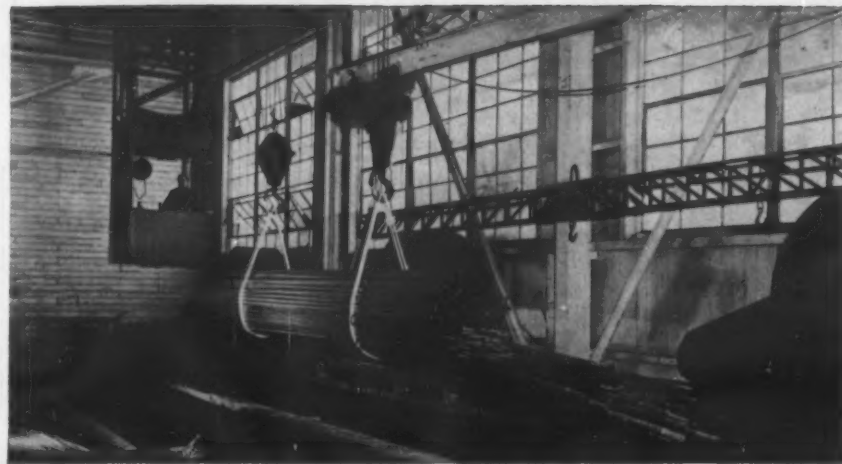
Screen

Provides Shelter

Steel panels with clamp hinges serve as screens or shields, indoors or outdoors. Units may quickly be joined to make shelters to house equipment or personnel. A variety of curtain fabrics are available. Panels come in 2 sizes: 3 ft. x 5 ft. and 3 ft. x 6 ft.

Price: \$19.95 to \$27.32. Delivery: 10 days.

Frommelt Industries, Box 419, Dubuque, Iowa. (PW, 5/9/60)



SYNTHETIC FIBER ROPES take on variety of handling jobs: Pacific Tube Co. uses dacron slings to take 5,000 lb. of stainless steel tubing through pickling solution (top). Carrier Corp. uses nylon rope to move impeller wheel for compressor (bottom left), and nylon webbing is used to carry a 1,500-lb. impeller and shaft assembly (shown bottom right).

Synthetic Fibers Challenge Natural Ropes And Cables in Battle for Cordage Market

New York—Although natural fiber ropes continue to find a big market in meeting today's cordage needs, the newer synthetics are coming up fast. For example:

• **Carrier Corp., Syracuse, N. Y.**, uses slings of synthetic cordage and webbing to move heavy compressor shafts and wheels along the production line. The synthetics replace wire cable, which can mar painted surfaces.

• **Rice-Powell Elevator Corp., Chicago**, uses 300-ft dacron shovel lines to guide scoops unloading grain barges. The dacron lines handle heavier scoops than the manila lines formerly used, and have slashed the cost of unloading 1,000 bushels of grain from \$7.50 to \$5, Rice-Powell estimates.

• **American Bridge Div., U. S. Steel Corp., Pittsburgh**, employs nylon rope for bridgemen's safety lines, since tests for tensile and impact strength have shown nylon's superiority.

But less expensive natural fibers are still popular for most rope uses. In a typical year, more than 900-million lb. of hard fibers are used for one kind of cordage or another. Most commonly used are Manila hemp, sisal, and istle, although New Zealand hemp and Mauritius hemp also prove popular.

Here's how common natural fiber ropes compare:

Manila. Strongest and most durable of natural fibers, new clean Manila of good grade is hard but pliant.

Sisal. From 65% to 80% as strong as Manila, but is stiff and tends to splinter. Costs somewhat less than Manila (its quality is lower), but it can serve well over a considerable period of time in many applications.

Mexican sisal (henequin). About 60% as strong as Manila and is most often used when better grades of rope are in tight supply.

American hemp fiber. About 80% as strong as Manila, but is much softer and is not highly resistant to abrasion.

When tarred, it can give fair service in some applications.

Jute and Cotton. Only half as strong as Manila, these natural fibers are not recommended for uses where strength and durability are important.

Synthetic ropes meet specialized demands for strength and for water and chemical resistance.

Here's how synthetic fibers stack up: **Nylon.** Is up to three times as strong as Manila, absorbs shock better, does not rot or mildew, requires no preservatives, and proves resistant to alcohol, aldehydes, alkalis, dry cleaning compounds, soaps, synthetic detergents, and many other chemicals. Nylon is used for safety lines, drop hammer ropes, textile and paper machine carrier ropes, and general utility ropes.

A large steel producer recently tested ropes for safety lines for personnel. A 200-lb. weight was placed on one end of a natural fiber line 1/2 in. in diameter, and another 200-lb. weight was put at one end of a nylon line of the same diameter. The natural fiber line gave way when the weight was dropped a distance of 4 ft. But the nylon line withstood a weight drop of 9 ft.

Dacron. Has low elongation—won't stretch much. Dacron is 65% as strong as nylon and is highly resistant to chemicals. It absorbs little moisture and resists rot and mildew. Although Dacron costs substantially more than nylon rope, it is popular where minimum stretch is desired.

Polyethylene. Stronger than Manila, polyethylene resists abrasion and chemical and micro-biological attack.

Columbia Rope Co. claims that although synthetics have higher first cost than natural fibers, slings manufactured of nylon or dacron, often help to reduce over-all costs of material handling. Slings of synthetic webbing are highly flexible, very strong, and light in weight. They improve load balance and gripping power to lift tough-to-handle items.



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for the wise
aluminum fabricator

THE WORD IS...

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Aluminum is not new to Scovill. We were one of the very first mills in the country to start processing this new metal when it became commercially available in the late 1880's. But commercial Aluminum Sheet produced to the same closely controlled specifications Scovill established for Brass Strip was a NEW IDEA when we introduced TRUSPEC Aluminum.

THE WELL-BEHAVED ALUMINUM SHEET

Fabricators have long wanted Aluminum like this . . . because it can so effectively help them control such common problems as "earing" and "orange peel" effect . . . because it can reduce time-consuming adjustments and promote longer tool life . . . because Scovill has made available long-length coils (up to 100 lbs. per inch of width) and the sheet itself is remarkably uniform in gauge, from side to side and end to end.

Scovill believes the customer now gets what he wants . . . in TRUSPEC Aluminum Sheet identified by this Trademark.

it PAYS to specify...

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MILL PRODUCTS

identified by this trademark

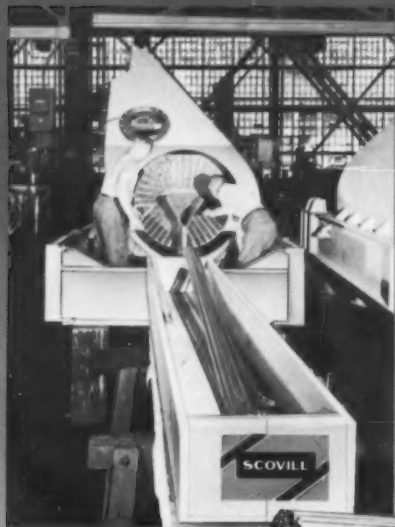


made better to bring out the BEST in your products

Scovill Manufacturing Company, Mill Products Division, 99 Mill St., Waterbury 20, Conn. Phone PLaza 4-1171.

35C59

where trouble-free performance is a matter of
national security



each of newest
nuclear subs
will take aboard
MORE THAN
4 MILES
of Scovill
cupro-nickel, 30%
heat exchanger tube

SCOVILL

We're proud to be making this important contribution to the long-service dependability of these nuclear-powered submarines.

Like all other components of their nuclear-powered propulsion machinery and equipment, the Foster Wheeler main condensers, shown above being tubed with Scovill Cupro-Nickel, 30% Heat Exchanger Tube, have passed the most exhaustive performance tests it has been possible to devise. The same tube specification is also being installed in the ejector condensers. All of the tube is electronically tested on new equipment at the Scovill Tube Mills before delivery.

Scovill Cupro-Nickel, 30% Heat Exchanger Tube has a long record of trouble-free service on U. S. Naval vessels and those of many other nations. It is a first choice of design and operating engineers where salt water or corrosion conditions are severe, particularly at elevated temperatures and when the circulating media travel at high velocities. The corrosion resistance is excellent; strength of the alloy remains constant over a wide temperature range.

Why not discuss your own heat exchanger tube conditions and problems with Scovill Technical Service . . . considered by many the most experienced in the field.

HEAT EXCHANGER TUBE

for Applications from Marine to Petrochemical, from Compressor Intercoolers to "Cat-Cracker" Exchangers, in these popular Alloys . . . Phosphorized Admiralty • Admiralty • Arsenical Admiralty • Red Brass, 85% • Deoxidized Copper • Arsenical Copper • Cupro-Nickel, 10%-20%-30% • Aluminum Brass • Aluminum Bronze, 5% • Muntz Metal • Duplex Tube.

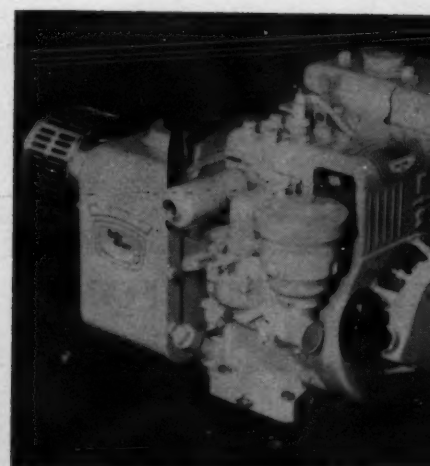
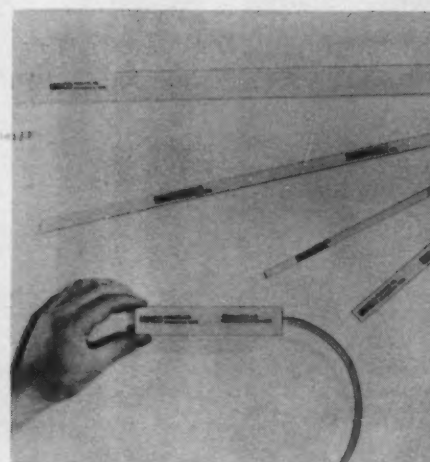
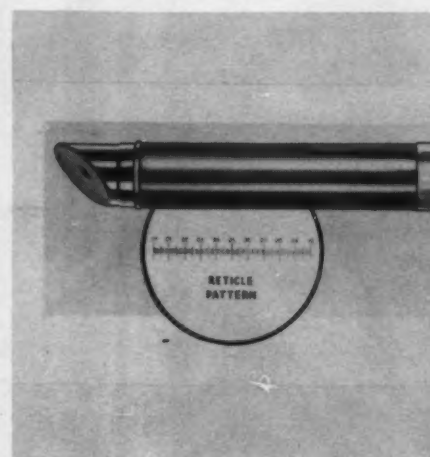
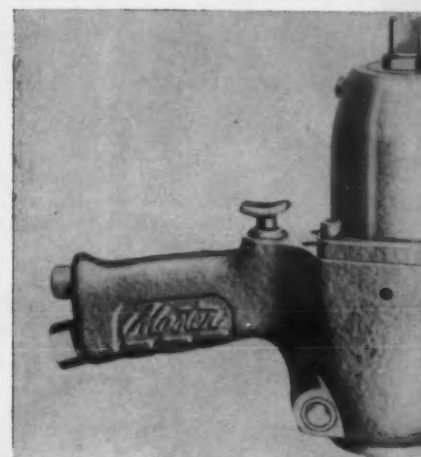
SCOVILL MANUFACTURING COMPANY, Mill Products Division, 99 Mill Street, Waterbury 20, Connecticut. Phone PLaza 4-1171.



18SC59

Your Guide to

(Continued from)



May 9, 1960

Your Guide to New Products

(Continued from page 26)



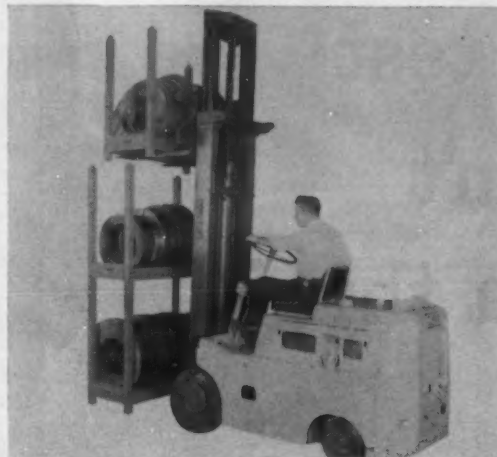
Impact Wrench

Uses Air Power

Air-powered impact wrench, designed for low operator fatigue in fast precision assembly work, has $\frac{3}{4}$ -in. bolt size capacity, weighs 5 $\frac{3}{4}$ lb., is available in shank sizes of $\frac{1}{2}$ in., $\frac{3}{8}$ in., and $\frac{7}{8}$ in. Bearings support drive shanks to eliminate frictional drag.

Price: \$285. Delivery: immediate.

Master Power Corp., Bedford, Ohio. (PW, 5/9/60)



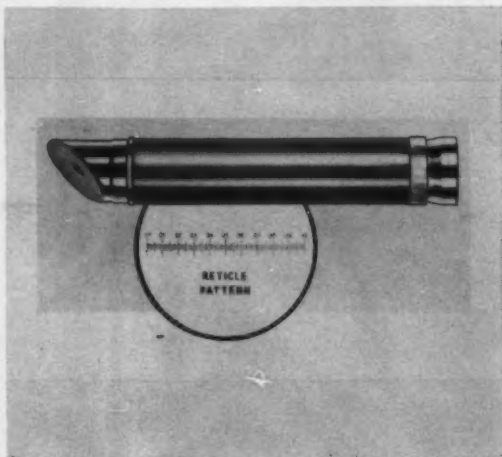
Coil Racks

Hold 6,000 Lb.

Portable stacking strip coil racks are available in 4 models to hold strip in diameters from 24 in. to 42 in. Open construction simplifies inventory taking, and 3 in. under-clearance allows fork-lift entry from 4 sides. Capacity of racks runs up to 6,000 lb.

Price: \$29 to \$34.40. Delivery: 3 to 4 wk.

Jarke Mfg. Co., 6333 Howard St., Chicago 48, Ill. (PW, 5/9/60)



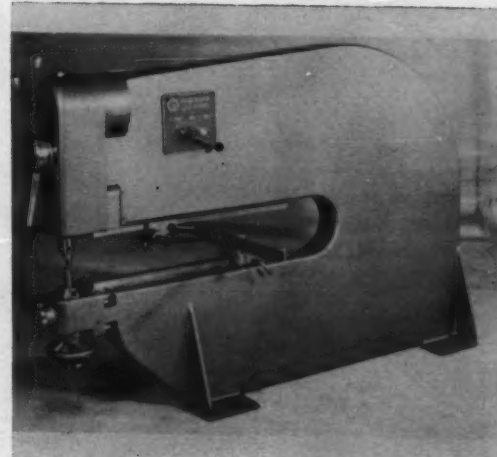
Microscope

Fits in Pocket

Microscope, no larger than a fountain pen, measures and examines small parts under 50X magnification. Readings may be made directly from the glass-etched reticle, which is calibrated to measure 0.1-in. to 0.001-in. divisions.

Price: \$7.95. Delivery: immediate.

Edmund Scientific Co., 99 E. Gloucester Pike, Barrington, N. J. (PW, 5/9/60)



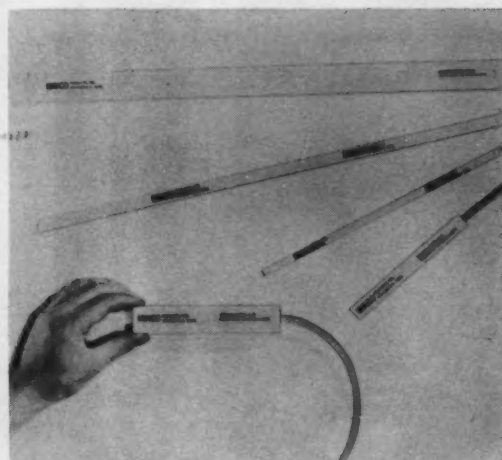
Metal Worker

Cuts Sheet and Plate

Metal worker has throat depth of 28 $\frac{1}{2}$ in. and edge-cutting capacity in mild steel of $\frac{1}{4}$ in. Unit is recommended for use in model shop, engineering, and research work. A full line of tooling is available for louvering, flanging, planishing, nibbling, and cutting.

Price: \$1,140. Delivery: immediate.

Homesstrand Machine Tool Corp., Greenwich, Conn. (PW, 5/9/60)



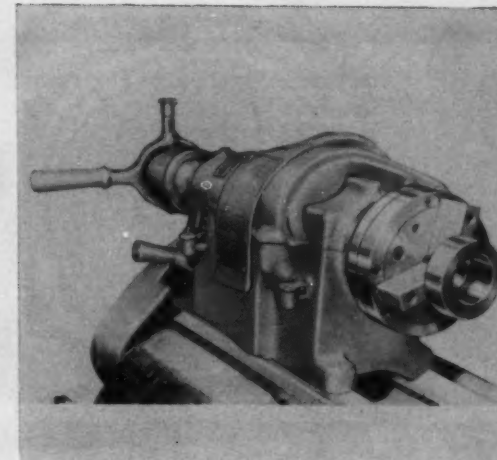
Temperature Detector

Operates to 500 Deg. F.

Resistance detector, Class H, performs in temperature sensing applications up to 500 deg. F. The device comes in any width from 0.30 in. to 1.25 in., and in any length from 6 in. to 22 in. Detector features non-inductive winding of wire sensing elements.

Price: \$12 to \$24 each. Delivery: immediate to 30 days.

Minco Products, Inc., 740 Washington Ave., N., Minneapolis, Minn. (PW, 5/9/60)



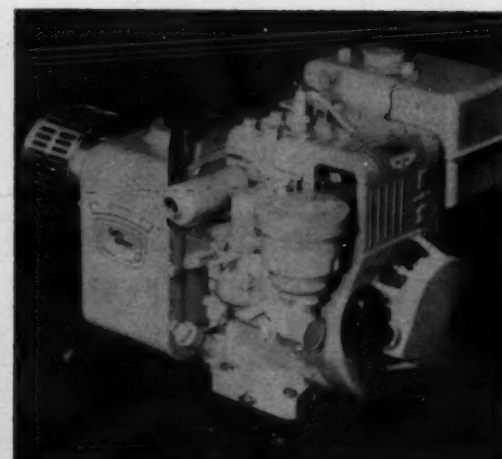
Precision Chuck

Weights 8 $\frac{1}{2}$ Lb.

Chuck, designed for use on high-speed precision lathes, boring machines, and grinders, has blank top jaws which may be bored out to fit the workpiece. Performance is accurate to less than 0.0005 in. Chuck operates by either air cylinder or lever-type collet closer, weighs 8 $\frac{1}{2}$ lb.

Price: \$245. Delivery: 4 to 5 wk.

Power Grip, Inc., Rock-fall, Conn. (PW, 5/9/60)



Centrifugal Pump

Handles Up to 7,000 Gal.

Centrifugal pump has 4-cycle engine with automatic recoil starter, oil bath air cleaner, suction strainer, and shock-absorbing rubber mounts. Light in weight and simple in design, the pump is available in 2 models to handle 5,000 or 7,000 gallons per hour.

Price: \$149.50 and \$159.50. Delivery: immediate.

Pacific Mercury, 13232 Leadwell, North Hollywood, Calif. (PW, 5/9/60)

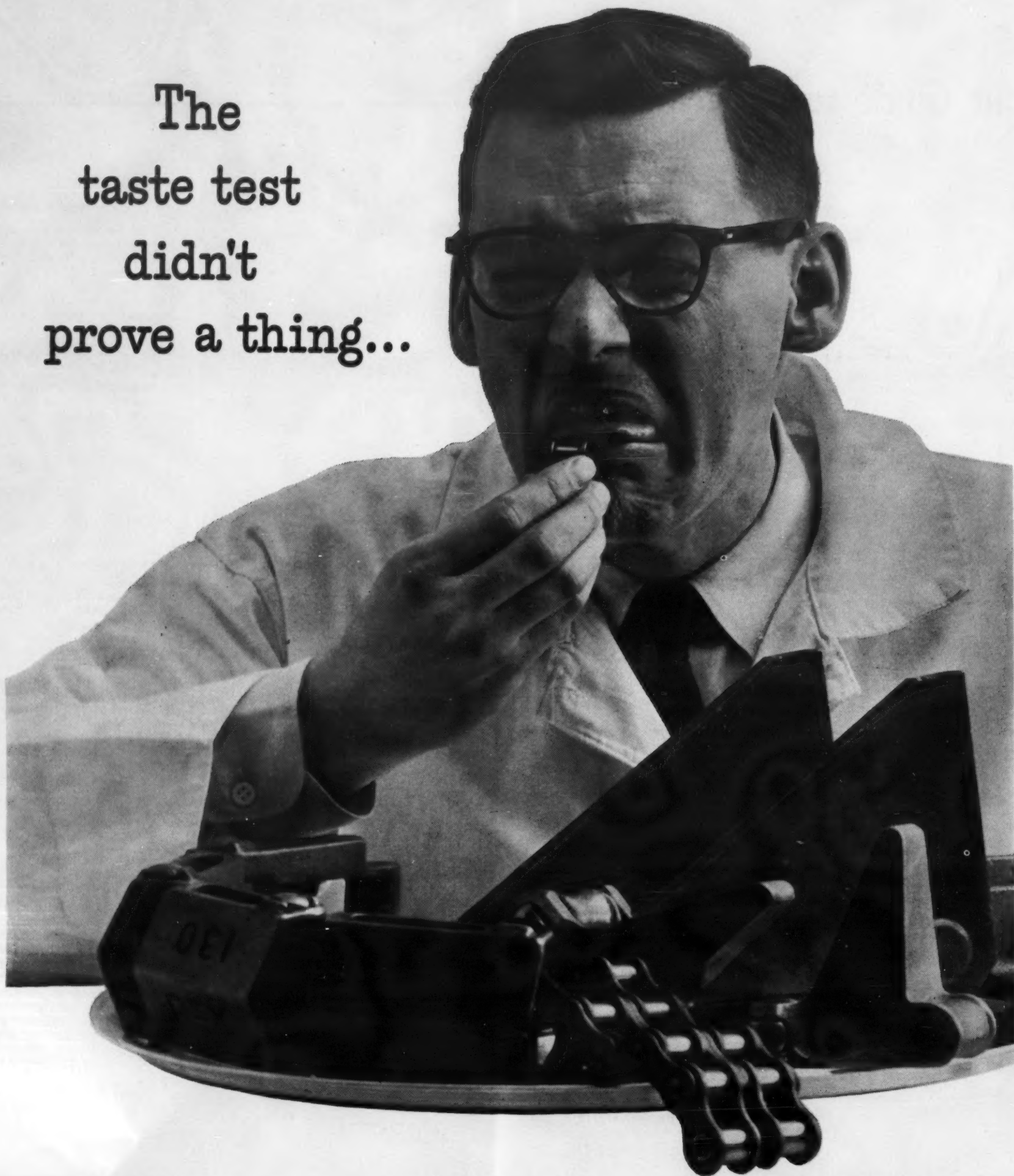
Purchasing Week Definition

Traffic Symbols (Part I)

Ad val. Ad valorem (according to value).
A.Q. Any quantity.
A.W. All water.
A/W Actual weight.
Cir. Circular.
C.I.F.I. & E. Cost, insurance, freight, interest, and exchange.
C.L. Car load.
Cor. L. Corrosive liquid.
C.W.O. Cash with order.

D/B/a. Doing business as.
Diff. Differential.
Et-seq. And following.
F.B. Freight bill.
G.A. General average.
I.L. Interline.
Inf. L. Inflammable liquid.
Inf. S. Inflammable solid.
Inv. Invoice. (PW, 5/9/60)

The
taste test
didn't
prove a thing...



About all it proved was you can't pick a chain by its taste! Actually, to demonstrate the superiority of Rex Chains, we rely on the best test of all: the *user test*. Just check our claim with any Rex user. All we have to offer is unmatched quality...for power transmission or conveying.

Ask your Rex Distributor or District Sales Engineer for the Rex Quality Story. CHAIN Belt Company, 4702 W. Greenfield Ave., Milwaukee 1, Wis. In Canada: CHAIN Belt (Canada) Ltd., 1181 Sheppard Ave. East, Toronto.

REX[®]
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REX IS BEST...IN THE USER TEST

New IBM System Cuts Planning Time, Costs

New York — International Business Machines Corp. has launched a new Programmed Applications Library to cut as much as 80% of planning time and money involved in buying data processing equipment.

Under the new Library system, IBM will offer prepackaged industry computer programs, which include all the information to be fed into the computer to make it function.

The first of its programs is for public utility customer billing systems. "Essentially all utilities have the same problems in this

area," said an IBM spokesman. "By giving them one standard package, we cut down on the planning and costs necessary to develop a program on an individual company basis."

The new library package will take care of up to 80% of the computer programs needed for standard operations for a company in a standard industry.

"The remaining 20% still will have to be worked out on an individual company basis," the IBM official said.

At this point, the library will

be developed to handle programs for the intermediate-sized computers IBM 7070 and IBM RAMAC 305. The utility customer billing package has been worked out on the 7070 and a hospital accounting program is now ready for the RAMAC 305.

Each program includes program instructions, block diagrams, and problem definitions needed for computer processing in a given industry application. Customers have only to make "limited additions of modifications to complete the job."



PURCHASING WEEK'S St. Louis correspondent Theodore Schafers was panel moderator at Eighth Annual Purchasing Conference, St. Louis.

Drug and Utility Firms to Join In Chemical Venture

Odessa, Texas—A joint venture in producing and marketing petrochemicals has been announced by El Paso Natural Gas Co. and Rexall Drug and Chemical Co. The project includes construction of plants here for the production of olefins, polyolefins, and chemicals.

The first plants to be built are scheduled to go on stream in early 1962. They will produce ethylene, propylene, conventional polyethylene, linear polyethylene, and polypropylene.

Initial capacity of the olefin plant will be in excess of 200-million lb. per year. Combined capacity of the polyolefin plant will be in excess of 150-million lb. per year.

A PENNY/A PART

can be a big thing
when you are buying

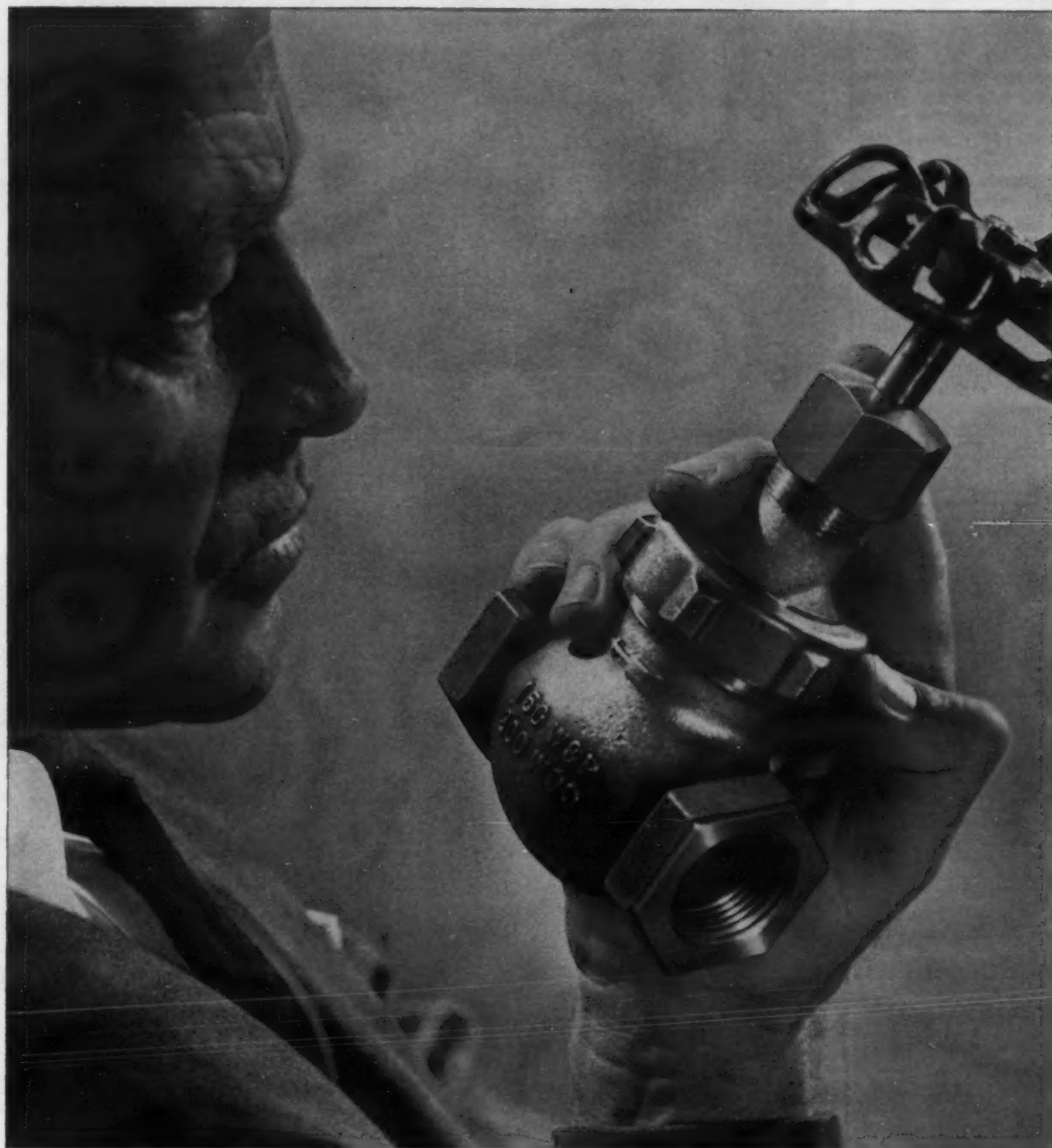
METAL STAMPINGS

... and low cost production is possible at ETASCO because of our very complete facilities for blanking, piercing, drawing, welding, etc. YOUR BLUEPRINTS sent to ETASCO for quotes will not obligate you, and may very well mean more profit to you.

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successful ironworks is located



10075-V

MEN WHO BUY VALVES for heavy-duty service quickly see the plus values in O-B plug type valves. Union ring reinforces centerpiece joint—stainless steel seat and plug are O-B-500-hardened—plug is self-leveling. Really rugged globe and angle valves that lick your toughest problems! Ask your distributor for the valve in the orange-and-black box.

OHIO BRASS COMPANY • Mansfield, Ohio

O-B VALVES



Profitable Reading for P.A.'s

New Books

American Business Writing, by Harvey E. Drach. Published by American Book Co., 55 Fifth Ave., New York City, N. Y. 406 pages. Price: \$4.95.

Designed to assist you in all types of written communication, this book skillfully discusses such subjects as good letter writing (grammar, punctuation, adding the "human touch" to letters, etc.), how to attract sales attention for your products and advertisements, interdepartmental communications and how to improve them, writing a business report, and much more.

The humorous style in which this book is written makes for enjoyable—as well as informative—reading.

1960 Manufacturers' Agents' Guide. Published by Manufacturers' Agent Publishing Co., 505 Fifth Ave., New York 17, N. Y. 166 pages. Price: \$15.00.

Comprehensive book lists more than 11,500 manufacturers who distribute their products through manufacturers' agents. It includes information on their principal products, estimated credit rating, and name of sales executive.

As an additional aid, the guide details steps to follow in communicating with manufacturers. Suggests commission scales, typical clauses to consider in a manufacturer-agent contract, etc.

From the Associations

Iron and Steel Products

Revised edition discusses metallic coated iron and steel products, including zinc-coated wire, strands, fencing, sheets, pipe, plus aluminum-coated iron and steel. In addition to 25 specifications, there are 5 methods of test, plus useful corrosion and maintenance information. Copies of this 176-page book (price, \$3.50) may be obtained from American Society for Testing Materials, 1916 Race St., Philadelphia 3, Pa.

From the Manufacturers

Aluminum Mill Products

Describes characteristics of aluminum and types of alloys. Contains tables on wrought alloys, including sheet, plate, foil, bar and wire, and extrusions. Some subjects discussed are: pipe, power cables, roof and siding, and bridge railing (24 pages). Kaiser Aluminum & Chemical Sales, Inc., Dept. NR-41, 300 Lakeside Drive, Oakland 12, Calif.

Electronic Products

Outlines company's plastic electronic components, including Teflon, delrin, nylon with comparative mechanical and electrical characteristics. Also gives data on hermetically sealed feed-through insulators, test points, spaghetti tubing and grommets. Bulletin AD-169 (24 pages). Garlock Electronic Products, Garlock Packing Co., 443 Main St., Palmyra, N. Y.

Precision Tools

Gives information on company's new Starrett tools, including satin chrome steel tapes, height gages and calipers, inside micrometers, protractors, and mechanics' tool chests. Contains specifications, precision features, and illustrations of the tools. Bulletin N. 143 (48 pages). L. S. Starrett Co., Athol, Mass.

Motor Reducers

Describes equipment such as blowers, compressors, conveyors,

cranes, mixers, stokers and machine tools. Data is given on 8 housing sizes for applications up to 125 hp and output speeds of 9 rpm. to 420 rpm. load characteristics, and torque ratings. Catalog MR-58 (28 pages). Philadelphia Gear Corp., 3620 "G" St., Philadelphia 34 Pa.

Power Supplies

Handbook gives tabular specification and application data on more than 400 power supply models including d-c supplies (to 600 kilovolts), miniature transi-

torized power supplies, inverters and converters, a-c line-voltage regulators, etc. (32 pages). Sorenson & Co., Inc., Richards Ave., South Norwalk, Conn.

Contract Forming

Describes three new high-speed forming machines plus plant facilities for special machining and parts manufacture. Information given includes typical component parts, tension control, engineering, etc. (15 pages). Cyril Bath Co., 32362 Aurora Road., Solon, Ohio.

Timesaving Tools

Gives information on more than 60 Greenlee tools, includ-

ing lightweight hydraulic conduit benders, hydraulic pipe pushers, cable pullers, power bits, chisels, etc. Outlines features of and complete size range for each tool. Bulletin E-240 (8 pages). Greenlee Tool Co., Rockford, Ill.

Oscillograph

Records up to 50 channels of test data on 12-in. wide record at speeds from 0.05-in. to 170-in. per sec. Normal fluorescent room lighting exposes record in sec. without chemicals, powder, or heat. Record storage and take-up spools are self-contained. Midwestern Instruments, P. O. Box 7186, Tulsa, Okla.





ROBERT A. PHILLIPS, of Norair Div., Northrop Corp., addresses meeting of the Electronics Industry Group of L.A. Purchasing Agents Assn.

L. A. Assn. Establishes Seventh Industry Group

Los Angeles—When the Los Angeles Purchasing Agents Association sets up its new Chemical Group this year, it will be the seventh separate industry group to be formed within the framework of this local purchasing organization.

The novel group system, initiated 10 years ago with the formation of the Food Group, has proved "a method of keeping a large organization knitted together and stimulating attendance at the regular monthly dinner meetings," says Ray Brick, ex-

ecutive secretary of the 1,150-member association.

"Basically," Brick explained, "by dividing the membership into small groups on the basis of industrial affiliation, the association provides a vehicle for the interchange of ideas among purchasing agents with specific interests in common."

Brick said his association's "remarkable" attendance record, which averages around 30%, is attributable to the fact that industry groups "peel off into their own private meetings" and are

provided with a 30 to 45-minute pre-dinner program tailored to their own interests.

"Industry group meetings are strictly business," Brick declared. Each group is headed by a chairman who is responsible for bringing a guest speaker. The pre-dinner meetings generally wind up with a question-and-answer period.

Currently active industry groups include the Food, Aircraft-Electronics, Distributor, Government Agencies, Metals, and Petroleum Groups. Each meeting, however, is open to any member of the association, and no roster is kept.

Each group has a sponsor who is a member of the association board of directors, serving as a liaison between his group and the board.

Even with the addition of the new Chemical Group, however, Brick points out that only 50% of the association's general membership will be represented by an industry group.

"We hope this will increase," he said, but interests among the remaining members are too varied at this point to warrant formation of any other groups.

How to put a "show" on the road

Charles "Chuck" Newman is an old hand at packaging showmanship. And an extraordinarily versatile one, too. As Union-Camp's Art Director for 26 years he's helped develop successful package designs for a wide variety of products.

"Chuck" and his talented team operate on the premise that every shipping container should be a traveling salesman for the products it carries as well as for the company that ships them. And there's certainly no lack of prospects. The average corrugated box, in its travels, meets hundreds of people and makes thousands of impressions. Yet its valuable billboard space often is neglected.

Distinctively designed boxes, as "Chuck" has demonstrated over and over, can work in dozens of ways. To merchandise a brand name—help create an image or personality for the product. Or, to tie-in with special or seasonal promotions. To dovetail with other advertising. To develop dealer preference by simplifying and speeding identification in inventory control. And through the combination of structural and visual design, to serve as eye-catching,

easy-to-assemble display pieces—right at the point of sale.

But remember, designing art and print copy for corrugated boxes is a job for experts. It's an exacting medium to work with. How well your design succeeds depends, to a great extent, upon how well the artist knows the intricacies of the process and how to get the most out of it. "Chuck" Newman has a lifetime of experience in getting "the most" out of paper packaging and his staff is trained to his own high standards.

Your Union-Camp corrugated box representative is your passkey to more effective use of printed corrugated boxes. He'll be happy to show how they can be of value to you. A note on your letterhead will bring him to your office.

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Subsidiaries: Allied Container Corporation, Dedham, Massachusetts
The Eastern Box Company, Baltimore, Maryland.

Harold Stockton Heads Dallas P.A. Association

Dallas—Harold M. Stockton, Dallas Power & Light Co., has taken over as new president of the PAA of Dallas.

Other newly elected officers include: D. Ray Langford, Sun Oil Co., first vice president; C. M. Newsom, Southern Union Gas



HAROLD M. STOCKTON

Co., second vice president; Fred D. Bradley, Southern Union Gas Co., secretary-treasurer.

Directors are Paul Talley, Mobil Oil Co., national, and John M. Morris, Lone Star Steel Co., alternate national.

President English Praises Assn. Constitution Change

Columbus, Ohio—A member of the Columbus Association of Purchasing Agents won high praise from Thomas O. English, NAPA president recently.

Speaking before the group, English, general purchasing agent for Aluminum Co. of America, Pittsburgh, cited Lyle A. Treadway, Federal Glass Co.'s purchasing agent, for a commendable job of revising NAPA's constitution. The changes, he explained, must now be voted on by local chapters.

Industry News In Brief

Wallboard Plant

Wilmington, Del.—Wallboard from synthetic gypsum rather than from the natural gypsum rock will be the product of Allied Chemical Corp.'s new plant in nearby Claymont, Del.

Construction is scheduled for completion late next year. The plant will be run by Allied's Barrett Div. The use of chemically manufactured gypsum eliminates the need for transporting rock from Nova Scotia, now the principal source for gypsum board on the East Coast.

Herschell Bids \$312,000

Hamburg, N. Y.—A former Atomic Energy Commission facility here may become a manufacturing plant if the Government accepts a \$312,000 bid placed by Allan Herschell Co.

The facility, adjoining and formerly operated by ACF Industries, is located at Clinton and Babcock Sts. Another bid of \$126,626 was submitted by the Industrial Salvage Co.

An executive of Allan-Herschell said that if the bid is accepted the plant will be used for manufacturing by one of the companies in the Wiesner-Rapp group. Herschell is a wholly owned subsidiary of Wiesner-Rapp Co., Buffalo.

Slate New Steel Plant

Palestine, Texas—A multimillion-dollar plant for original production of more than 1,000 tons of finished steel a day is scheduled to be constructed within six months near here.

Construction of the plant was announced by Sovereign Resources, Inc., of New York and its recently organized Texas subsidiary, Sovereign Steel of Texas. A rolling mill will be added at some future date to the original layout.

Firm to Up Output

St. Paul—Midwest users of ammonia and nitrogen-based fertilizers can look for increased supply of these products as a result of expansion plans by St. Paul Ammonia Products Inc., near here.

The company will increase capacity 25% to 110,000 tons annually at its nitrogen plant in a program that will cost between \$4 and \$8-million. The company also will begin making several solid nitrogen materials used in fertilizers.

GE Breaks Ground

Albany—Ground has been broken for a new \$1-million manufacturing plant for silicone fluids by the Silicone Products Department of General Electric at Waterford, N. Y.

The new building is part of a two-year expansion program aimed at gearing up plant capacity to meet anticipated production levels in 1963.

Humble Reorganizes

Houston—Enjay Co., a petrochemicals firm, will become a division of Humble Oil & Refin-

ing Co. on May 31 under the name Enjay Chemical Co.

The company will be directly responsible for both the marketing and coordination of Humble Co.'s chemical products activities in the U. S. Enjay will sell chemicals to Esso Export Corp. for distribution in foreign markets. Other divisions of Humble include Esso Standard, and Humble and Carter.

Completes 3-Yr. Plan

Philadelphia—E. F. Houghton

& Co. has completed a new plant in San Francisco, winding up a three year expansion plan for the producer of specialty oils, chemicals, and packings.

New Chemical Plant

Pittsburgh—A new \$4-million chemical plant designed to meet the growing demands of the plastics and resin industries, has been dedicated by Pittsburgh Chemical Co., and is scheduled to go on stream early in 1961. The plant will make maleic

anhydride, an intermediate in plastics and resins. Capacity of the new facility is 20-million pounds annually. The company is a subsidiary of Pittsburgh Coke & Chemical Co.

To Start Construction

San Francisco—Construction of a multimillion dollar corrugated container plant by Boise Cascade Container Corp., division of Boise Cascade Corp., will start this spring at Sunnyvale, Calif.

Completion is slated for early fall. The corporation recently acquired the corrugated division of Schmidt Lithograph.

Electronics Firm Begins Plant Expansion Project

Los Angeles—American Electronics, Inc. has started construction of a 100,000 sq. ft. research, development, and manufacturing complex near Fullerton.

The new \$1.5-million facility will provide needed expansion room for the firm's Electro-Mechanical Div., required by the fast rise in contracts and development of new products.

The company produces electronic components, data processing equipment, and electro-mechanical, nuclear, and toll collection assemblies.



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A feature-by-feature review of General Electric water coolers shows it pays to . . .

LOOK BEYOND THE OBVIOUS

No-squirt bubbler maintains continuous, proper stream height.

Anti-splash basin is designed to prevent splashing, spilling, splattering.



New top—easy to clean, smart appearing, electro-polished, stainless steel finish.

Attractive front panel snaps off; allows easy access to controls.

No-grope, full-width foot pedal permits easy water control.

At first glance, all water coolers may seem alike. But it will pay you to take a closer look at General Electric water coolers. Only General Electric coolers offer you TOTAL VALUE—a combination of product features and back-up services that give you more than just a water cooler. For instance:

Design Features—General Electric water coolers are built to last. You get style leadership, and compact, sturdy design. The features shown at left are typical. Others include: Easy-to-dial water temperature control and a hermetically-sealed refrigeration system that is lubricated for life.

Economy—13 models (including hot-and-cold, pressure and bottle-type models) are moderately priced. Operating costs are negligible.

Availability—Just check the yellow pages for your General Electric water cooler distributor. He can deliver the units you need immediately.

Warranty Protection—A written one-year warranty on all parts and five-year replacement agreement on the refrigeration system help you avoid major repair costs. Also, nationwide General Electric Service Centers are always close at hand.

Add to these advantages General Electric's long years of leadership with water coolers and you can see that only General Electric offers you all-round TOTAL VALUE for the water coolers you buy.

761-3



GENERAL ELECTRIC

A. O. Smith Corp. Starts Up Fully Automated Plant

Kankakee, Ill.—The first completely automated production line for fusing glass to steel, is now in operation at A.O. Smith Corp.'s Harvestore Products Div.

The new \$2.1-million plant addition is expected to triple the company's production of Permaglas industrial bulk materials handling systems and Harvestore mechanized feeding and processing equipment.

Pilot plant operations were started in January and now the division is heading into full production with all new equipment now in operation. The new facility is part of A. O. Smith's \$5-million expansion and modernization program.

The new automated plant includes nearly 3,000 ft. of overhead conveyor line, which begins at the east end of the new plant and winds its way through steel-forming, washing, grit blasting operations, liquid glass spraying booths, a large drying oven, and then through a long glass fusing furnace.

A 180-ft., glass-fusing furnace, described as the longest of its kind in the world, is divided into three gas-fired radiant tube firing zones and two cooling zones. The furnace, when operating at full capacity, consumes 24,000 cu. ft. of gas per hour.

Kaiser Industries Puts Private Communications Link-Up Into Operation

Oakland—A \$2-million private communications system linking 65 major plants and offices of Kaiser Industries is now in operation.

The private teletypewriter network, capable of handling more than half a million words daily, will speed business messages, sales orders and production reports between Kaiser's diversified interests in 27 states and the District of Columbia.

The system includes more than 27,000 miles of private lines and is fully automatic. It took two years to install.

Two switching centers, one here and one in Chicago direct and control all traffic on the network.

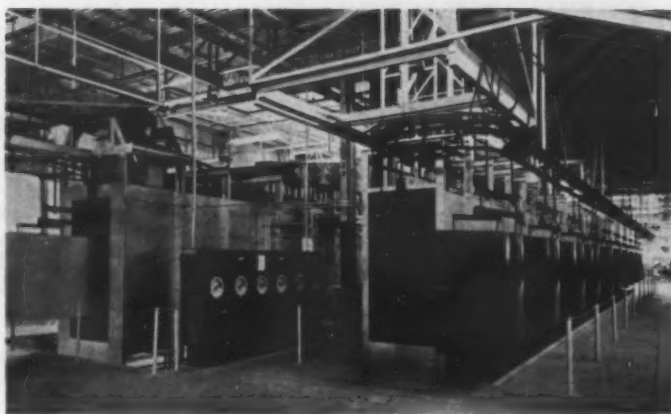
Messages prepared on perforated tape are transmitted and received at their destination automatically in tape form. Equipment at the switching centers automatically "reads" the tapes and sends them to their proper destination.

An incorrect code is rejected automatically and redirected to the proper location.

Firth Sterling, American Potash Agree on Program

Pittsburgh—An agreement to develop applications for titanium diboride in the aluminum industry has been reached by Firth Sterling Inc. here, and American Potash and Chemical Corp. of Los Angeles.

Development work on the joint program will be done by Borolite Corp., a wholly owned Firth Sterling subsidiary.



FULLY AUTOMATED production line for fusing glass to steel has gone on stream at A. O. Smith's Harvestore Products Div. plant in Illinois.

Smith-Corona Marchant Inaugurates Leasing Plan for Calculator Lines

Oakland, Calif.—Smith Corona Marchant Inc. has initiated a national leasing program covering Marchant's line of calculators and adding machines.

The plan, worked out in co-operation with U.S. Leasing Corp., will be offered through Marchant's 250 sales offices in the U.S. Here's how the program will work:

Marchant's offices forward the lease application to U.S. leasing. When approved, normally within

24 hours, the leasing company purchases the equipment and leases it to the Marchant customer with the Marchant sales representative completing the transaction.

"Leasing provides us with an excellent new sales tool," Ward J. Koepnick, Marchant general sales manager said. "We are convinced that by giving our customers the opportunity to either lease or purchase our equipment, we will increase our sales."



Why pay extra for door-to-door delivery? That's included with Railway Express service! Our Eager Beavers pick up the shipment at your very doorstep, see it safely all the way to your customer's door. There's no extra charge for this service within REA authorized limits in the U.S. And look what else you get with Eager-Beaver service:

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- Lower rates on certain shipment aggregations of 300 lbs. or more
- Special low rates on many other commodities
- The kind of transportation that best suits your particular needs

No other organization can match Railway Express Eager-Beaver service. And our long-range improvement plans are making it even better. Next time you ship, call Railway Express—and see!



Meetings

First Listing

Chemical Specialties Manufacturers' Association Show—Drake Hotel, Chicago, May 16-18.

Society of American Military Engineers Show—Mayflower Hotel, Washington, D. C., May 19-20.

Previously Listed

MAY

4th U. S. World Trade Fair—Coliseum, New York, May 4-14.

Material Handling Institute's Eastern States Show—Convention Hall, Philadelphia, May 9-11.

Instrument Society of America—Instrument Automation Conference & Exhibit, Brooks Hall, San Francisco, May 9-12.

American Foundrymen's Society Castings Congress & Exposition—Convention Hall, Philadelphia, May 9-13.

American Society for Metals—Southwestern Metal Exposition and Congress, State Fair Park, Dallas, Tex., May 9-13.

3rd Western Regional Handling and Industrial Packaging Show—Great Western Exhibit Center, Los Angeles, May 11-13.

25th Annual International Distribution Congress & Business Aids Show—Statler-Hilton Hotel, Buffalo, N. Y., May 15-18.

National Association of Purchasing Agents—45th Annual Convention and Inform-A-Show, Biltmore Hotel, Los Angeles, May 22-25.

Oil & Gas Power Conference & Exhibit—American Society of Mechanical Engineers, Hotel Muehlebach, Kansas City, Mo., May 22-26.

Triple Industrial Supply Convention—Conrad Hilton Hotel, Chicago, May 23-25.

Design Engineering Show—Coliseum, New York, May 23-26.

American Textile Machinery Exposition—The Auditorium, Atlantic City, N. J., May 23-27.

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In the World of Sales . . .

Norman Altman and Harry K. Welsh have been appointed general sales manager and assistant general sales manager respectively, **Tube Distributors Co., Inc.** **Edwin A. Raymond** was named general manager, **Western Div.**

J. Wade Jacobson was made sales manager by **U.S.A.C. Transport, Inc.**, Detroit.

Paul J. Selinger moved up to assistant general sales manager at

Standard Tube Co., Detroit.

Charles H. Schminke has been promoted to general sales manager for **U.S. Expansion Bolt Co.**, York, Pa.

William M. Colwell has taken the post of vice president in charge of sales, **Printing Paper Div.**, with **Arden-Cortland Paper Co., Inc.**, Jersey City, N. J.

Michael F. Dowley, Jr., has joined **Stanley-Judd**, drapery

hardware division of the **Stanley Works**, Wallingford, Conn., as general sales manager.

Frederick R. Downs, Jr., was elected vice president sales, **Stanley-Humason, Inc.**, subsidiary of the **Stanley Works**, Forestville, Conn.

James E. Brass joined **Owatonna Tool Co.**, Owatonna, Wis., as industrial sales manager.

William C. Goeckel has been

advanced to director of sales by **Snyder Corp.**, Detroit.

Edward W. Haskell was made sales manager of **Truck-Man Lift Trucks**, Jackson, Mich.

V. E. Boyd has been appointed director of automotive sales operations, **American Motors Corp.**, Detroit.

Frank D. St. Hilaire was named vice president of sales, **Charles Simkin & Sons, Inc.**, Perth Amboy, N. J.

William J. Bennett has been appointed national field sales manager, **Behr-Manning Co.**, Troy, N. Y.

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provide greater power transmission capacity . . . longer wear life . . . greater resistance to shock

1. "High Hardness" gear . . . hardened after cutting. Precision processing permits maximum hardness while holding accuracy within extremely close tolerances.
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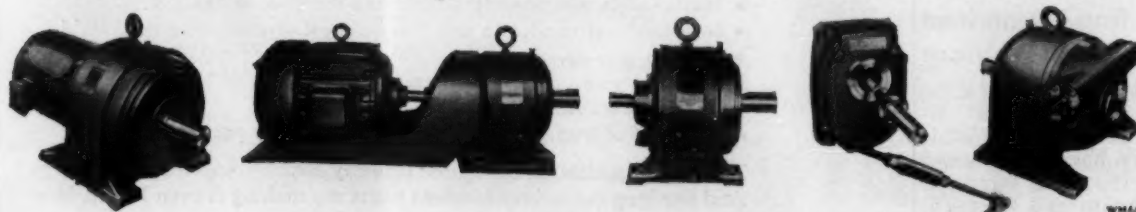
Wagner Gear Drives are built with "High Hardness" gears . . . made from forged blanks of alloy steel, carefully hardened after cutting. This special process develops file-hard tooth surfaces with tough, ductile tooth cores . . . maintains close-tolerance accuracy. High strength with high accuracy gives greater capacity, longer wear life than ordinary gears of the same size and weight, plus maximum resistance to shock. Table shows performance comparisons.

Positive, powerful, slower than motor speeds should mean one thing to you: Wagner Gearmotors. They are built to operate for years at peak efficiency. Advanced design and rugged construction with a minimum number of wearing parts, make this a certainty. Wagner Gearmotors have positive oil seals; continuous lubrication of all moving parts; extra-high capacity bearings; integral bearing housings; and rigid pyramid-mounted cast housings. Extra capacity bearings give them high overhung load ratings, too.

Wagner makes both integral-type and all-motor gearmotors, speed reducers and shaft-mounted speed reducers. They're available in single, double, triple or quadruple reductions . . . horizontal or vertical foot or flange mountings. Another important factor: prompt shipment. Standardized components permit immediate assembly of all standard sizes and types; you get equipment when you need it.

Want to know more? Call your nearby Wagner Sales Engineer; he will be glad to help you select the right drive for your application. Bulletin MU-227 gives full information.

Wagner Electric Corporation 6416 PLYMOUTH AVENUE, ST. LOUIS 33, MISSOURI



WM60-15

Congress Hits Pentagon Buying Practices; Urges More Economy

(Continued from page 1)
up on the policing of procurement. The final version of the appropriation comes out of the Congressional hopper this spring. One of the major factors leading to the appropriations cut has been the constant criticism of military buying tactics by the General Accounting Office.

For example, both the Air Force and General Dynamic's Convair Div. are sharply criticized in a recent GAO report for Convair's decision in 1958 to make 34 air conditioning units for B-58's instead of farming out the job or adapting existing equipment.

The report estimates that this decision, agreed to by the Air Force, cost the government an unnecessary \$2.6-million. It recommends closer Pentagon control over decisions by prime contractors on whether to make accessory items themselves or buy them elsewhere—the old "make or buy" problem.

CONVAIR TAKEN TO TASK

In this case, Convair was taken to task for designing and making air conditioning carts, which are rolled up to the plane while it is on the ground to keep delicate equipment cool until the plane's own air conditioning equipment starts functioning.

Last year, the House Appropriations Committee ordered a one per cent cutback in general Defense Dept. procurement funds—a total of \$131.1-million—to force improved buying methods. But it was omitted from the final appropriation bill.

The committee rapped the Pentagon for failure "to formulate reasonable and realistic plans and specifications which would allow the maximum utilization of competitive bidding."

It also criticized the Pentagon's failure to follow up on General Accounting Office recommendations to tighten up on procurement policies. Said the committee's report: "Normal good judgment is too frequently lacking in procurement and supply management programs."

CITES EXCESS PROFITS

The report cites cases of 24% to 41% profits on Army Nike missile subcontracts, \$3-million overcharges on an Air Force contract for fire control radar, and several instances where the services were able to buy equipment significantly cheaper through advertised procurement rather than negotiated contracting.

As was the case last year, the House Committee did some major reshuffling in individual procurement and research and development projects.

The net result is an increase of \$122-million in the total budget over the Administration's latest request. The committee voted the Defense Dept. an appropriation of \$39.3-billion, which is \$113-million more than was appropriated last year. The sum excludes funds for military construction included in a separate appropriation measure.

On the plus side, additional funds are earmarked for procurement of transport planes (\$250-million extra for versions of the Lockheed C-130B and Boeing KC-135); \$241-million for additional Polaris missiles and submarines; and \$321-million extra for anti-submarine forces.

On the other side of the ledger, the committee knocked out funds for the Navy's \$293-million aircraft carrier and cut the Air Force's Bomarc B missile program even more.

Rayon Strapping Challenges Steel On Many Industrial Packaging Jobs

(Continued from page 1)
edges that can damage cartons or harm handlers.

• **Printability.** Rayon takes imprinting at low cost.

• **Ease of handling.** Avistrap coils weigh about 80% less than



Rayon Strapping in Use

comparable yardages of steel, cutting freight, handling and storage expenses. A 1,000 yd. spool of heavy-duty avistrap measures 13½ in. in diameter and is 6 in. wide.

• **Economy.** For comparable yardages, Avistrap generally runs \$1 less per coil than steel strapping. It costs ½ as much as filament tape, and offers higher tensile strength.

American Viscose is selling both stationary and portable dispensers for the new material. Dispensers are now manual, but the company is working on a prototype conveyor system for automatic packaging.

Avistrap is the first non-steel material to aim for the general purpose strapping market. Spokesmen for major plastics companies told PURCHASING WEEK that they had no current plans underway to sell similar products. A U.S. steel official said that it was "too early to evaluate what impact the new material might have on steel strapping users."

Cost of the strapping will vary by zone and by quantity ordered. Here are the 1-coil prices (Eastern zone) subject to quantity discounts: ¼ in. size, 2,600 yd., \$24.04; ⅜ in. size, 1,750 yd., \$23.11; ½ in. size, 1,300 yd., \$22.31; ¾ in. size, 1,000 yd., \$21.98; 1 in. size, 700 yd., \$21.56.

Late News in Brief

Ocean-Rail Rates

New York—A top railroad official has set the spring of 1961 as the date for implementation of low ocean-rail rates to meet St. Lawrence Seaway competition.

Arthur E. Baylis, New York Central System vice president, told a meeting here last week of the North Atlantic Ports Association that the negotiations between port leaders, ocean steamship lines, and a group of major Eastern railroads are now underway. While some progress had been made, he said, he doubted if a final agreement would be reached in time for the 1960 Seaway season.

Waste Paper Prices Drop

Chicago—A continued slowdown in demand for waste paper has dropped prices for the raw material to the lowest level in almost two years.

Prices for mixed paper—the lowest grade and most plentiful—were being quoted here last week at \$6 a ton, a drop of \$2. Corrugated waste also hit \$18 a ton, a \$2 drop, while old newspapers fell to \$13, down \$3.

Galvanized Steel Sales Up

Skokie, Ill.—Demand for galvanized steel is expected to rise sharply during the second quarter of 1960, a leading steel warehouse executive declared last week.

Seymour Waldman, Rolled Steel Corp. president, said demand during the past two weeks had increased 30% over any two-week period during the previous two months. A severe winter, he added, had hurt the industry but, as car makers begin tooling up in July, production will climb.

March Imports Up

Washington—The Department of Commerce reported a continued rise in imports for the month of March.

In what was termed a "preliminary estimate," the department stated that March purchases from abroad had climbed some 5% above February levels. The \$1.6-billion worth of goods, however, was somewhat below first-of-the-year predictions.

Office Machine Makers' Rivalry Sparks 'Unofficial' Discounting

(Continued from page 1)
customer purchases," said a New York dealer. "Depending on the reaction, we might even have to apply this method to other pieces of equipment."

Office equipment makers, however, denied they were encouraging the trend. "We're going to maintain stability in office equipment prices as much as possible," declared Les Overlock, vice president of marketing for Smith-Corona Marchant Inc. in Syracuse. Overlock admitted, however, there had been "a softening in the typewriter market and considerable price maneuvering."

SETS RECOMMENDED PRICE

"All we can do is set a recommended list price," a Royal McBee Corp. official agreed. "What the dealers do after that is something beyond our control."

A spokesman for Remington-Rand, which only last week introduced a new typewriter model on the market, told PURCHASING WEEK that changes in list prices were "out of the question for this year, at least."

He said the margin of profit was already too low "for us to afford any cuts in list price. What we really need is a price hike, but that would only give the foreign machine makers a still greater advantage."

A spokesman for another leading manufacturer described the influx of foreign imports as "deplorable. They've got us behind the eight ball," he added. "It's not like some industries where automation is the answer. The German manufacturers are just as automated—more in some cases. They're offering top quality, but they're paying laborers

\$1 an hour, and we're paying \$2.50 an hour."

SMITH-CORONA MOVES

Smith-Corona, at least, has decided to take advantage of the "cheap labor" market overseas. The company has already launched plans for shifting its entire portable typewriter manufacturing operation to a new plant in West Bromwich, near Birmingham, England.

The new plant provides facilities for a "four-fold rise in output," said Victor G. Severin, vice president of Smith-Corona's International Div. He said 60% of the plant's output would be exported to the U.S. Smith-Corona is also planning new plants in Brussels, Belgium, and Hamburg, Germany.

Smith-Corona, along with Royal McBee, has petitioned the U.S. Tariff Commission to slap a 30% duty on all foreign typewriter imports. Smith-Corona officials declined to relate their announced move overseas to fears that the Commission would reject the proposed tariff.

Observers agreed, however, that the move for a 30% tariff had little chance of success because it's not supported by other U.S. producers. International Business Machines, Inc., Remington, and R. C. Allen Co. have all remained "neutral" on the issue. They have not appeared before the Commission to testify for or against it.

Officially, Underwood has also remained neutral. Unofficially, however, a spokesman admitted his company, which is now controlled by Olivetti of Italy, was working to maintain a status quo in the tariff area.

Chile Mine Strike Delays Price Cut Of Copper in U.S.

(Continued from page 1)
and political unrest in South Africa will probable postpone an anticipated drop in U.S. copper prices.

Industry sources agree, however, that should the Chilean strike—the main pillar in the support—be shortlived, Stateside overproduction will still bring a drop in copper prices, possibly early in the third quarter.

As late as Thursday, only Anaconda's new El Salvador mine and Potrerillos smelter in Chile had been struck. But the miners, who walked out over a new labor agreement, had threatened to call sympathy strikes at Anaconda's other big Chilean properties and Kennecott's Braden mine.

PRICE CUTS STILL CONSIDERED

"Price cuts are still under consideration," one big producer told (PURCHASING WEEK). "This strike is just a temporary relief."

He explained that with U.S. production booming way beyond consumption, there will be substantial excess stocks in producers' hands in the third quarter. "And I haven't seen any new production cuts to ward off this situation," he added.

Kennecott, however, offers a much different viewpoint. At the company's annual meeting last week, Charles R. Cox, president, said Kennecott has sold its domestic production through May, plus the entire year's output of its Chilean subsidiary—which produces strictly for European consumption.

"Domestic needs for consumption and inventory rebuilding should require full production of our U.S. mines well into the later months of this year," he remarked.

Other large producers, however, did not entirely agree with this thinking. They point to production outrunning consumption and the lack of sustained demand by copper fabricators as two main worries.

"Once the Chilean situation is settled," one producer said, "only production cutbacks or increased U.S. demand will offset a price decrease."

GSA Announces Plans To Sell More Natural Rubber From National Stockpile

Washington—General Services Administration, under its policy of selling off natural rubber from the national stockpile, has announced it plans to dispose of 59,219 tons before the close of the current fiscal year, June 30.

This amount is in addition to 61,000 tons which already has been sold. These sales are made under GSA's program of selling rubber before it deteriorates. They are in addition to the agency's long-range plan to reduce its total stockpile by some 400,000 tons over the next 9 years.

The sales announced this week would have been replaced with new purchases under GSA's former rotation program, but Congress killed the program last year and directed GSA to continue selling off rubber without buying replacement stocks.

Materials Fight Gets Hotter; Buyers to Benefit

(Continued from page 1)
new and burgeoning market needs.

But the real winner of this "conflict" already is moving into the driver's seat with nothing ahead but a clear road of supply abundance and an almost unlimited number of material combinations and varieties—plus an excellent outlook for dependable price stability.

He's the industrial purchasing agent with technical know-how and buying savvy to take full advantage of the massive product research facilities and customer service functions offered by virtually every major producer and individual product manufacturer. Countless medium size and smaller firms have joined Westinghouse, GE, and the other industrial giants within the past year in establishing consumer service facilities and centers for new product development.

These will help the industrial P.A. take full advantage of the gains to be made from the material struggle being waged at all levels and echelons—particularly between the major rivals, of steel, aluminum, plastic, and combinations of these materials—in products that offer a tailor-made plus over nature's original form.

Domestic production statistics covering the last decade show some dramatic advances by aluminum and plastic in proportion to their older rivals steel, copper, and other basic materials. The chart depicts output—in capacity—ratios only. But the spectacular climb of aluminum and plastic during the past 10 years indicates those newer material forms have made extensive inroads into established products area formerly the sole domain of steel, copper, brass, lead, and zinc.

Plastic's rapid growth can be attributed to two factors: (1) Development of new materials with unique properties and (2) steady prices. The government Wholesale Price Index shows plastics materials up only 2% over the 1947-49 base—contrasted with 87% for finished steel and 74% for aluminum sheet.

Aluminum growth, on the other hand, is due to huge research programs (Alcoa alone spent \$18-million on research and development last year) and

"super-salesmanship" of the major producers.

The materials battle gives the P.A. a two-fold advantage: better materials at lower prices. A PURCHASING WEEK nation-wide spot check of plants found almost every company switching materials to some degree. But these changes have come from organized programs—weren't hit-or miss affairs.

"As a result of value analysis, substitution goes on continuously," a Milwaukee equipment maker commented. And John Toule, P.A. at Allis-Chalmers' Hyde Park plant added, "we will substitute anything that will save us a dollar without sacrificing quality."

The whole substitution question was best summed up by a Los Angeles electric equipment manufacturer, "Price is everything, provided you have a choice of materials to do the job. If you have no real choice, price is nothing."

Purchasing executives agreed almost to a man that the steel strike had little, if any, permanent effect on their material choices. However, a Pittsburgh manufacturer noted that the steel shortage set some people thinking: "Such materials as aluminum, glass and plastics are getting closer study now. More buyers and management people are acutely conscious that a change might be made."

ALUMINUM: Market aims—construction, automotive, packaging, electrical. The major aluminum companies have been doing more promotional work than any other materials group. Unlike plastics (whose unique properties have made it the only way to solve many problems), every new aluminum application has resulted from hard selling.

Sales of aluminum building products rose 40% last year; transportation uses jumped 35%, and packaging applications grew an impressive 50%.

National Homes provided a major building breakthrough when it standardized on aluminum exteriors for its entire 1960 line. Use per house rose to 150 lb. last year, contrasted with 80 lb. in 1955.

W. T. Ingram, general sales manager of Reynolds Metals Co., thinks aluminum has a bright fu-

ture in industrial construction, claims that "in many cases aluminum-clad factory buildings are saving their owners up to 50% in maintenance costs."

Corvair's all-aluminum engine block gave the automotive end of the business a real shot-in-the arm, and more motor blocks are in the works for '61 models. Pontiac's brake drums were another aluminum first. C. H. Paterson, vice president of Power Train Group at Ford, makes "the conservative prediction that within five years the average car will contain 100 to 120 lb. of aluminum." This contrasts with the current average of 50 lb.

Foil wraps have been the packaging mainstay, but 1960 is expected to be the first big year for the aluminum can. Almost 50-million lb. are expected to go into cans this year, up from 15-million in 1959. Big users: citrus juices, motor oils, beer, and fish.

Some top industry officials have expressed disappointment at the slow growth of aluminum in the electrical field. But they see progress in the new Allis-Chalmers outdoor switchgear housing and Alcoa's H-frame transmission tower. Aluminum conduit now gets 10% of the total market.

PLASTICS: Market aims—construction, transportation, packaging, pipe, structural components.

Packaging has taken a large percentage of plastic output (see PW, Apr. 25, '60, p. 18). Experts expect a real boom in industrial packaging market to parallel current consumer success.

DuPont's Delrin has opened door to plastic's use in wide variety of structural parts and machined components. DuPont has pumped \$42-million into research and development of the new material—and estimates that 75% of its potential markets lie in areas now held by metals.

Delrin's toughness, stability and versatility are expected to find it jobs in gears, bearings, hardware, containers, and appliances. Raw material cost is higher than metal, but a molded Delrin part does not need the costly finishing that often is required of metal die-casting.

Plastic makers have high hopes of obtaining high volume transportation jobs. Reinforced plas-

This Week's

Purchasing Perspective

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tributes of rival computer models selling for up to 10 times its \$30,000 cost.

And almost simultaneously, RCA officials were telling stockholders at their annual meeting that the company had moved "wholeheartedly and unreservedly" into the data processing field and that EDP was the key to RCA's future growth. Stockholders were left with the implication that RCA was ready to take on IBM, the industry's biggest computer-EDP manufacturer, and expected to double its sales volume within the next decade—on the strength of its data processing expansion alone.

FLEET POINTERS—A white car currently commands the best price in the used-car market, according to Service Leasing Corp. A recent study by service leasing at used car auctions showed that blue, then red, then green were the next most preferred body colors from the standpoint of resale value. Gray and "metallic" colors ranked in the "strongest dislike" category.

Other resale selling points: Dealers like the four-door sedan body type best, and fleet cars in all lines get better prices if they have large heaters of the "fresh-air" type. Service leasing—a firm that buys cars and trucks for fleet-leasing and sells them at replacement time—also noted that radios are so essential to used car sales it "would appear advisable to develop some way of authorizing radios as standard equipment in fleets."

Service Leasing also suggests a set package of specifications for fleet purchases. For example—standard models should have manual transmissions, six-cylinder engines, blackwall tires and solid-color paint. Middle-line fleet vehicles should go in for automatic transmissions and eight-cylinder engines, and some two-tone coloring. Only in "top-line" cars should you add whitewall tires, power steering, etc.

BUYERS GUIDE—Office equipment, with a rise of 21%, paced the gain in dollar volume of new business booked by non-electrical machinery manufacturers in March, according to the McGraw-Hill Index of New Orders. Over-all dollar volume rose 4% during the month although manufacturers of engines and turbines and of construction and mining machinery reported 5% dips from February . . . Want to buy some old pumping units, 33 tons of used IBM cards, 2,000 feet of pipe, or two 80,000-barrel, riveted, steel storage tanks? Contact the surplus sales division of Union Oil Co. at Los Angeles.

tics are now going into truck trailers and cabs, bus bodies and over-the-road tankers.

Passenger car use hasn't come up to expectations, although the 22 lb. used per car this year is double the 11 lb. of 1954. Much of the increase has gone into "hidden parts"—arm rest bases, heating system ducts, electrical insulation, etc. Thomas Risk, manager of materials, fuels, and lubricants for Ford's engineering staff, expects a 300% to 500% increase within the next 10 years. Probable uses: fuel lines, gas tanks, housings, and steering wheels. Current low-production methods used to form Corvette plastic body are not adaptable to volume needs.

European auto companies are way ahead of U.S. when it comes to using plastics. Volkswagon, at half the weight of most American models, uses 40 lb. U.S. lag is attributed to lack of familiarity with plastics, lack of mass production techniques, and Detroit reticence to pioneer plastic use.

Building materials makers (which took 22% of plastic output in 1959) think their 2% penetration of the building material market "leaves plenty of room for improvement." They are planning to show what they can do in a new experimental housing development in Pittsburgh which plans to build 1,680 dwellings using the most advanced housing concepts.

Koppers is proposing use of its Dylite expandable-polystyrene-

foam core panels. Dow and Alcoa are also suggesting foam core panels, aluminum-faced in Alcoa's case. Most building experts think plastic's future lies in the structural area—such as the techniques used in the U.S. Pavilion in Moscow.

STEEL: Market aims—specialty steels, combinations with plastics, lighter tin plate.

Steel companies have started to fight inroads of other materials through intensified research and promotion. Recent development of lighter tin plate shows steel realizes it has a fight on its hands.

American Iron and Steel Institute recently began a "Steelmark" labeling program to educate the public on the value steel plays in their lives. U.S. Steel is holding a group of "Steelmark Days" in several key plant districts. Merchants, civic, industrial, labor, and municipal leaders will direct activities.

Combinations of steel and plastic have kept the industry from losing some important markets. Use of vinyl-covered steel was up 14% last year. Weight-saving honeycomb structure is finding wide acceptance in the aircraft and missile fields.

OTHER MATERIALS: Lead Industries Assn. is spending \$750,000 on research in the construction and transportation areas. Zinc makers have upped the current research budget 50%, and the major copper producers have formed an association to find new uses for the metal.

Price Changes for Purchasing Agents

Item & Company	Amount of Change	New Price	Reason
INCREASES			
Isoprene synthetic rubber, Shell Chem., fob sellers, Torrance, Calif., lb.....	.05	.35	good demand
Dried blood, per unit n.....	.25	\$5.50	
Myrobalans, 3—1's, ton	\$4.00	\$48.00	
Crushed, ton	\$5.00	\$70.00	restore cuts
Gypsum products, Kaiser Gypsum, wholesale 2%			
Gum arabic, amber sorts, lb.....	.03	.255	
Powdered, lb.03	.31	high demand
Gum turps., So., gal.....	.01	.51	
REDUCTIONS			
Trimellitic anhydride, Amoco Chem. (development price), fob Whiting, Ind., lb.....	\$2.00	\$1.00	prod. econs.
Menthol, Brazilian, regular sized crystals, lb.....	.20	\$8.20	
Acetophenetidin, imp., lb.....	.04	\$1.20	improved supply competition
Nicotinic acid, kilo.....	.50	\$4.30	
Tankage, nitrogenous, 12% per unit N.....	.10	\$4.65	comml. prod.
Octobluorocyclobutane (Freon-C318), DuPont, 14-lb cylinders, lb.....	\$13.35	\$6.65	
2,200-lb. tanks, lb.....	\$15.16	\$4.84	
Gasoline, some Mid-Cont. suppliers, gal.....	.0025	.1125	heavy inventories
Copra, Coast, ton.....	\$7.50	\$192.50	



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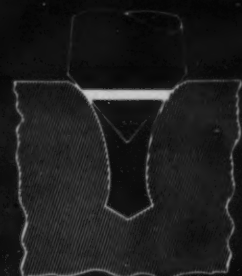
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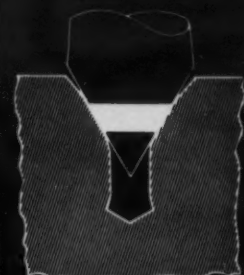
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